

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT				
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Ute Tribal 16-04Q				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ANTELOPE CREEK				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME ANTELOPE CREEK				
6. NAME OF OPERATOR PETROGLYPH OPERATING CO						7. OPERATOR PHONE 208 685-7685				
8. ADDRESS OF OPERATOR 960 Broadway Avenue, Ste 500, Boise, ID, 83703						9. OPERATOR E-MAIL ppowell@pgei.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 1420H623511			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Indian Tribe			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL	FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE	797 FNL 571 FWL		NWNW	16	5.0 S	3.0 W	U			
Top of Uppermost Producing Zone	10 FNL 10 FEL		NENE	17	5.0 S	3.0 W	U			
At Total Depth	10 FNL 10 FEL		NENE	17	5.0 S	3.0 W	U			
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 571			23. NUMBER OF ACRES IN DRILLING UNIT 640				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 39			26. PROPOSED DEPTH MD: 6499 TVD: 6375				
27. ELEVATION - GROUND LEVEL 6205			28. BOND NUMBER LPM4138336			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342				
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	20	14	0 - 53	5.0	Unknown	10.0	Class G	25	1.17	15.8
SURF	12.25	8.625	0 - 493	24.0	J-55 ST&C	10.0	Class G	226	1.17	15.8
PROD	7.875	5.5	0 - 6499	15.5	J-55 LT&C	10.0	Class G	497	1.92	12.5
							Class G	349	1.46	13.4
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Ed Trotter				TITLE Agent			PHONE 435 789-4120			
SIGNATURE				DATE 10/31/2013			EMAIL edtrotter@easilink.com			
API NUMBER ASSIGNED 43013526300000				APPROVAL Permit Manager						

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Formation		Subsea	TVD	MD
Rig KB=~13' above GGL		6232	0	0
Surface Formation = Uinta				
Uinta		6219	13	13
Green River		4718	1514	1520
Trona		3363	2869	2933
Mahogany Shale		3214	3018	3088
"B" Marker	Waterflood Unit Interval	2110	4122	4237
"X" Marker		1619	4613	4735
Douglas Creek Marker		1473	4759	4882
"B" Limestone		1084	5148	5272
Base Castle Peak Limestone		510	5722	5846
BSCARB		111	6121	6245
Wasatch		-155	NDE	NDE
Formation at TD: Green River	Rig TD	-140	6375	6499

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Substance	Formation	Subsea	TVD	MD
Base of moderately saline ground water*	Uinta	6000	232	232
Oil/Gas	Douglas Creek	1473	4759	4882
Oil/Gas	Castle Peak	510	5722	5846

Any water encountered during drilling shall be sampled, analyzed and reported to BLM, Vernal office using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

Flow rate (or blowtest)	Temperature	pH	TDS
Dissolved Iron	Dissolved Magnesium	Dissolved Bicarb.	Dissolved Sulfate
Dissolved Calcium	Dissolved Sodium	Dissolved Carbonate	Dissolved Chloride

All depths through the "Base of moderately saline ground water"*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

*Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

3. PROPOSED CASING PROGRAM:

String	Hole	Casing	Top - MD	Bottom - MD	Weight lb/ft	Grade	Thread
Conductor	20"	14"	surface	53'	steel	Cond'r	none
Surface	12-1/4"	8-5/8"	surface	493'	24	J-55	STC
Production	7-7/8"	5-1/2"	surface	6499'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tensile
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	244,000 lb
Production	7-7/8"	5-1/2"	4,040 psi	4,810 psi	248,000 lb

- All casing will be new or inspected.
- The surface and production strings shall have a minimum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 4237' MD.

4. PROPOSED CEMENTING PROGRAM:

String	Top	Cement Description	Sacks	Excess	Weight (ppg)	Yield (ft³/sk)
	Bottom		Vol (ft³)			
Conductor	0 ----- 53	Construction Grade Cement	Sufficient volumes to grout Conductor			
Surface	0 ----- 493	Class G +2% CaCl2 +0.25 lb/sk Cello Flake	226 ----- 264	30%	15.8	1.17
Production Lead	0 ----- 4237	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	497 ----- 955	30%	12.5	1.92
Production Tail	4237 ----- 6499	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	349 ----- 510	30%	13.4	1.46

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary cementing operation the cement does not circulate to surface, a remedial cementing operation shall be performed only if necessary to lift cement above the Trona at 2933' MD.



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- A 2000 PSI Working Pressure Annular shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

BOPE TESTING PROCEDURE:

- The BOPE shall be tested by a professional tester to conform to Onshore Order #2.

6. MUD PROGRAM:

A. SURFACE HOLE

- The surface hole will be drilled with an air/mist system from 0' to 493'. All cutting shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-off valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator requests the following variances from Onshore Order 2 part E during drilling of the surface hole. Operator will use air drilling techniques only on surface hole:
 - Operator requests a variance to regulations requiring the blooie line discharge to be 100' from the wellbore. Due to reduced location size, the blooie line discharge will be approximately 75' from the wellbore and securely anchored.
 - Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. A mister shall be on the end of the blooie line.
 - Operator requests a variance to regulations requiring compressors be located in the opposite direction from the blooie line; a minimum of 100' from the wellbore. Due to the reduced location size, the compressors shall be located as close as is reasonable to the opposite direction from the blooie line and 75' from the wellbore.
 - Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl shall be utilized on the diverter system in place of a BOPE.



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

B. PRODUCTION HOLE

- The production hole shall be drilled with a freshwater polymer system from 493' to 6499'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.8 lbs/gal. although mud weight up to 10lbs/gal may be used if necessary to prevent wellbore wall instability due to the planned inclination of the well.
- All cuttings and circulating medium shall be directed into the reserve pit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to allow for the mudweight to be raised to 10.5 lbs/gal should need arise.
- During drilling operations, pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location. Operator does not plan on using a gas detector on the mud return due to the fact that any abnormal pressure is the result of offset water injection.

C. HAZARDOUS MATERIALS AND POLLUTANTS

- Chromate additives **shall NOT** be used in the mud system on Indian lands without prior DOGM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

7. EVALUATION PROGRAM:

Logs: Triple Combo TD to base of surface casing (AIT, DSN, CDL)
Base of surface casing to surface (GR only)

Cores: None planned

DST: None planned

Testing: Operator plans no testing until the completion phase of the well.

8. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H₂S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1625 PSI (0.25 PSI/ft gradient).
- This well is in the vicinity of active injection wells. Nearby active injection can cause pressures up to a 0.433 PSI/ft gradient (2814 PSI).

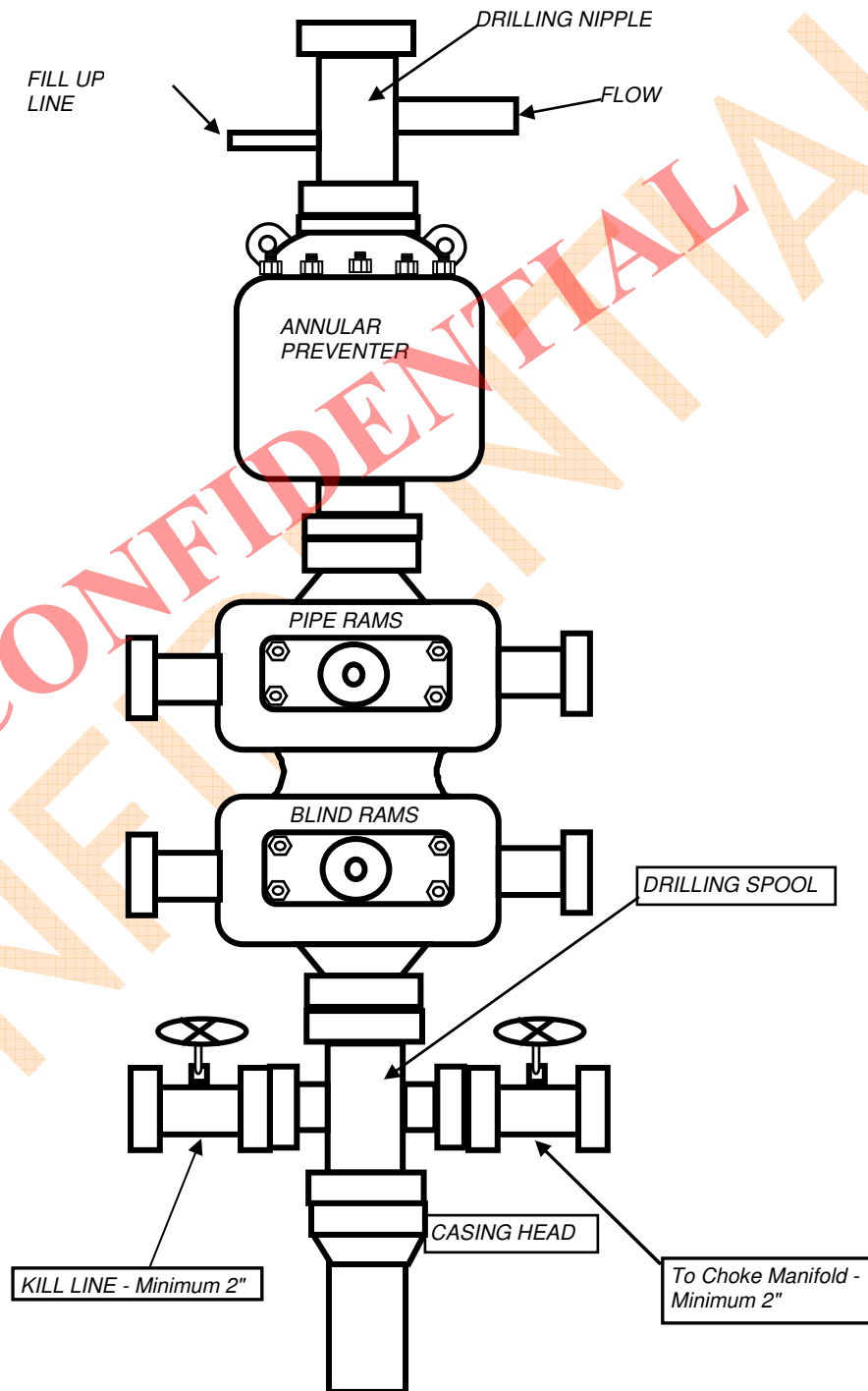
9. DIRECTIONAL WELL PLAN:

- Well shall be drilled directionally in order to limit surface disturbance.
- A Positive Displacement Motor with a bent sub of 1.25° to 1.75° will be used to control well path.
- A directional survey shall be taken at least one (1) time per 100' of drilling.
- Anti-collision equipment will not be used as there are no existing wells in the vicinity of the proposed well path.
- While cutting the Waterflood Unit Interval from 4237' to 6245', the actual well path may be allowed to vary up to 100' horizontally from plan in order to prevent excessive slide drilling. Above and below the Waterflood Unit Interval, variances in excess 100' horizontally from plan may be allowed.
- Directional drilling plan is attached.

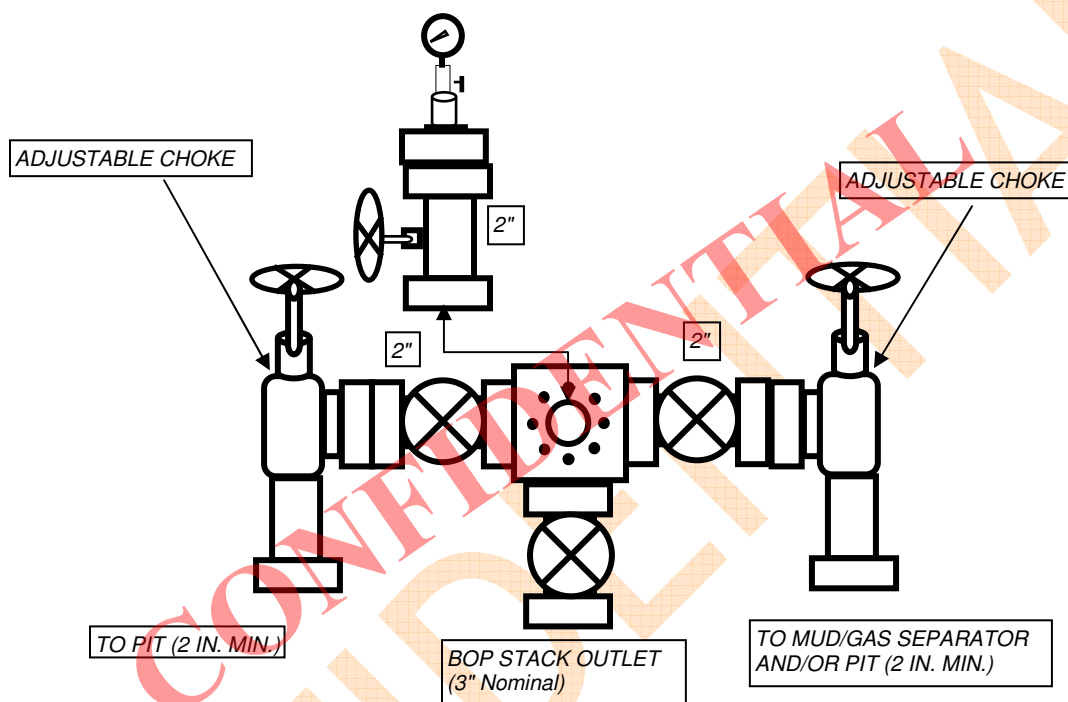


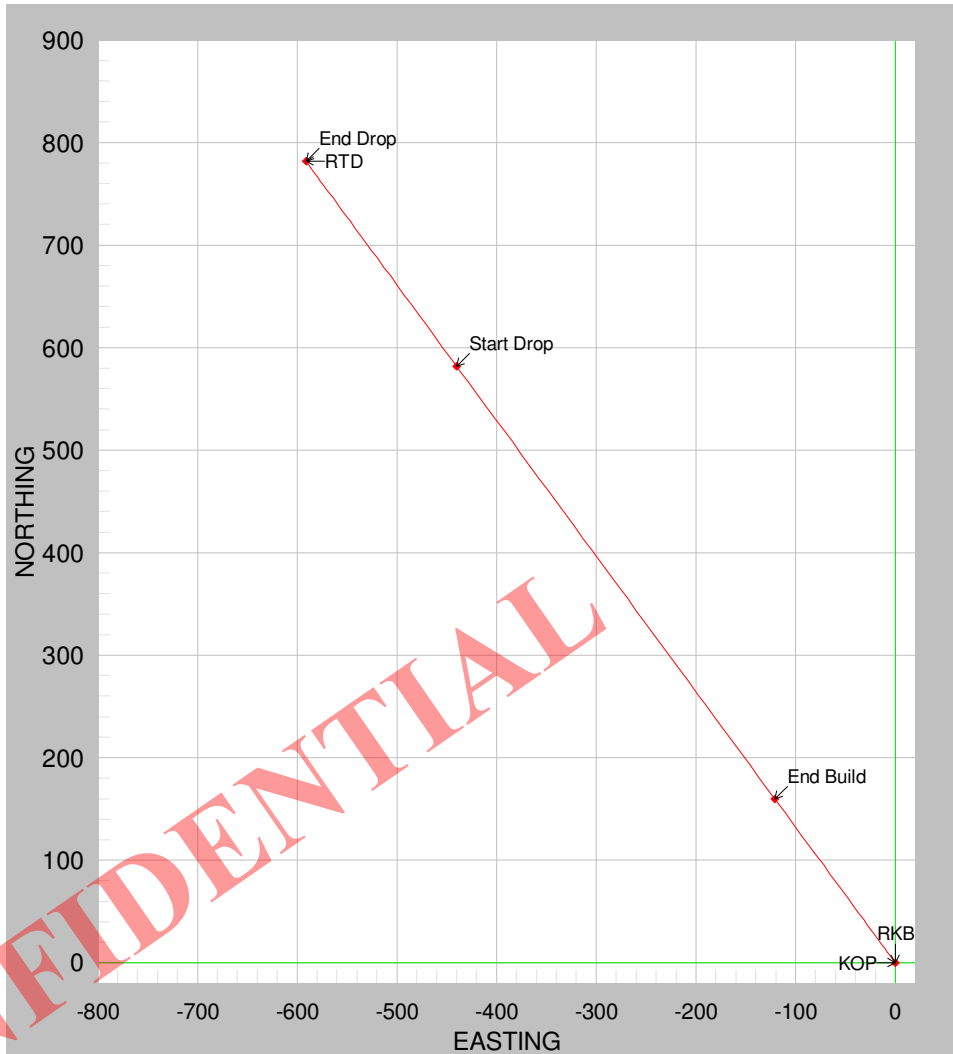
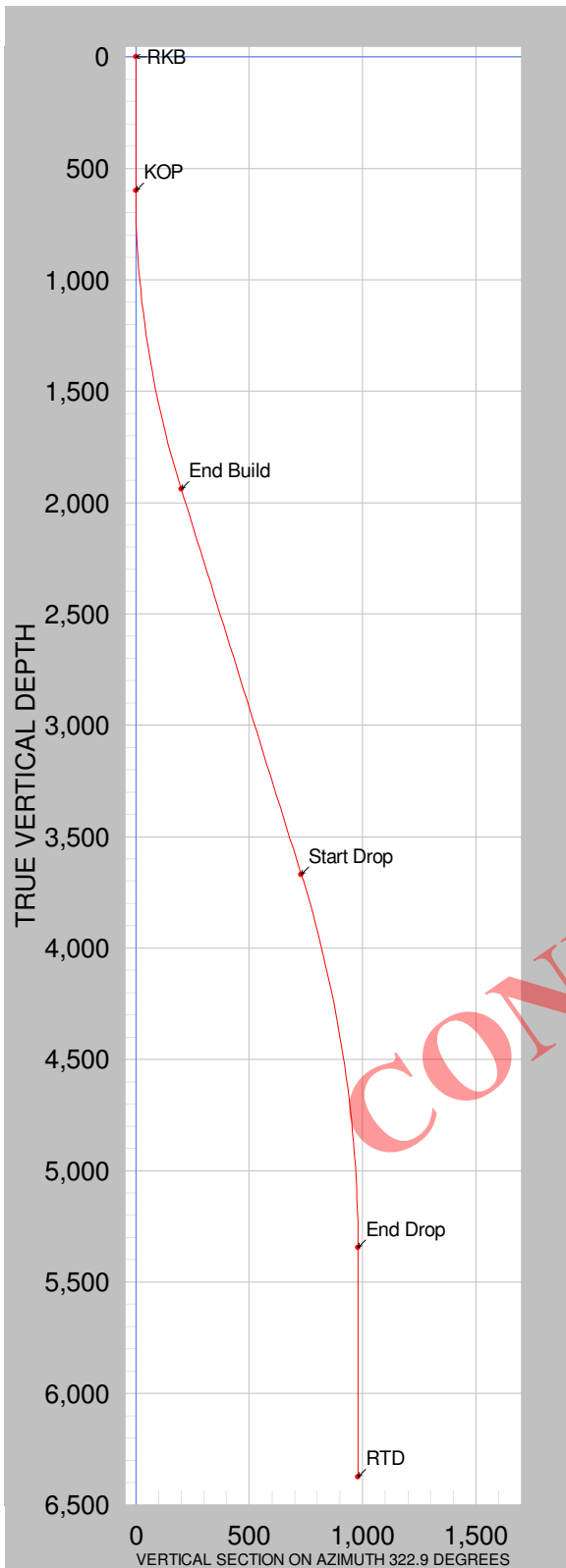
CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04Q
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH
TYPICAL 2,000 p.s.i. CHOKE MANIFOLD





Ute Tribal 16-04Q

PETROGLYPH



#	Reference	Type	MD	Inc	Azi	TVD	N	E	DLS	Vert S
0	RKB	Tie Point	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1	KOP	Vertical	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00
2	End Build	Build	1960.00	17.00	322.90	1940.13	159.74	-120.81	1.25	200.28
3	Start Drop	Tangent	3770.00	17.00	322.90	3671.04	581.82	-440.03	0.00	729.48
4	End Drop	Drop	5470.00	0.00	0.00	5346.21	781.50	-591.04	1.00	979.83
5	RTD	Vertical	6499.00	0.00	0.00	6375.21	781.50	-591.04	0.00	979.83

16-04Q, Plan 1

16-04Q, Plan 1											
Operator		Units		14:00 Monday, October 28, 2013 Page 1 of 4							
Field		County		Vertical Section Azimuth 322.9							
Well Name 16-04Q		State		Survey Calculation Method Minimum Curvature							
Plan 1		Country		Database Access							
Location				SHL: 797' FNL & 571' FWL BHL, SEC 17: 10' FEL & 10' FNL				MapZone		Lat Long Ref	
Site		UWI		SurfaceX		SurfaceY		Surface Long		Surface Lat	
Slot Name		API		Z Datum							
Well Number				Surface Z							
Project										Ground Level	
DIRECTIONAL WELL PLAN											
CONFIDENTIAL											
*** RKB (at MD = 0.00)											
0.00 0.00 0.0 0.00 0.00 0.00 0.00 0.00											
50.00 0.00 0.0 50.00 0.00 0.00 0.00 0.00											
100.00 0.00 0.0 100.00 0.00 0.00 0.00 0.00											
150.00 0.00 0.0 150.00 0.00 0.00 0.00 0.00											
200.00 0.00 0.0 200.00 0.00 0.00 0.00 0.00											
250.00 0.00 0.0 250.00 0.00 0.00 0.00 0.00											
300.00 0.00 0.0 300.00 0.00 0.00 0.00 0.00											
350.00 0.00 0.0 350.00 0.00 0.00 0.00 0.00											
400.00 0.00 0.0 400.00 0.00 0.00 0.00 0.00											
450.00 0.00 0.0 450.00 0.00 0.00 0.00 0.00											
500.00 0.00 0.0 500.00 0.00 0.00 0.00 0.00											
550.00 0.00 0.0 550.00 0.00 0.00 0.00 0.00											
*** KOP (at MD = 600.00)											
600.00 0.00 0.0 600.00 0.00 0.00 0.00 0.00											
650.00 0.63 322.9 650.00 0.22 -0.16 1.25 0.27											
700.00 1.25 322.9 699.99 0.87 -0.66 1.25 1.09											
750.00 1.88 322.9 749.97 1.96 -1.48 1.25 2.45											
800.00 2.50 322.9 799.94 3.48 -2.63 1.25 4.36											
850.00 3.13 322.9 849.88 5.44 -4.11 1.25 6.82											
900.00 3.75 322.9 899.79 7.83 -5.92 1.25 9.81											
950.00 4.38 322.9 949.66 10.65 -8.06 1.25 13.36											
1000.00 5.00 322.9 999.49 13.91 -10.52 1.25 17.44											
1050.00 5.63 322.9 1049.28 17.60 -13.31 1.25 22.07											
1100.00 6.25 322.9 1099.01 21.73 -16.43 1.25 27.24											
1150.00 6.88 322.9 1148.68 26.29 -19.88 1.25 32.96											
1200.00 7.50 322.9 1198.29 31.28 -23.65 1.25 39.21											
1250.00 8.13 322.9 1247.82 36.70 -27.75 1.25 46.01											
1300.00 8.75 322.9 1297.28 42.55 -32.18 1.25 53.35											
1350.00 9.38 322.9 1346.66 48.83 -36.93 1.25 61.22											
1400.00 10.00 322.9 1395.94 55.54 -42.01 1.25 69.64											
1450.00 10.63 322.9 1445.14 62.68 -47.40 1.25 78.59											
1500.00 11.25 322.9 1494.23 70.25 -53.13 1.25 88.07											
1550.00 11.88 322.9 1543.21 78.24 -59.17 1.25 98.10											
1600.00 12.50 322.9 1592.09 86.66 -65.54 1.25 108.65											
1650.00 13.13 322.9 1640.84 95.50 -72.23 1.25 119.74											

16-04Q, Plan 1

Operator		Units	feet, %/100ft	14:00 Monday, October 28, 2013	Page 2 of 4
Field		County		Vertical Section Azimuth	322.9
Well Name	16-04Q	State		Survey Calculation Method	Minimum Curvature
Plan	1	Country		Database	Access

Location	SHL: 797' FNL & 571' FWL BHL, SEC 17: 10' FEL & 10' FNL	MapZone		Lat Long Ref	
Site		SurfaceX		Surface Long	
Slot Name		SurfaceY		Surface Lat	
Well Number		Z Datum			
Project		Surface Z		Ground Level	

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
1700.00	13.75	322.9	1689.47	104.77	-79.24	1.25	131.36			
1750.00	14.38	322.9	1737.97	114.46	-86.56	1.25	143.51			
1800.00	15.00	322.9	1786.34	124.57	-94.21	1.25	156.18			
1850.00	15.63	322.9	1834.56	135.10	-102.18	1.25	169.39			
1900.00	16.25	322.9	1882.64	146.05	-110.46	1.25	183.12			
1950.00	16.88	322.9	1930.57	157.42	-119.06	1.25	197.37			
*** END BUILD (at MD = 1960.00)										
1960.00	17.00	322.9	1940.13	159.74	-120.81	1.25	200.28			
2000.00	17.00	322.9	1978.39	169.07	-127.87	0.00	211.98			
2050.00	17.00	322.9	2026.20	180.73	-136.69	0.00	226.60			
2100.00	17.00	322.9	2074.02	192.39	-145.50	0.00	241.22			
2150.00	17.00	322.9	2121.83	204.05	-154.32	0.00	255.83			
2200.00	17.00	322.9	2169.65	215.71	-163.14	0.00	270.45			
2250.00	17.00	322.9	2217.46	227.37	-171.96	0.00	285.07			
2300.00	17.00	322.9	2265.28	239.03	-180.78	0.00	299.69			
2350.00	17.00	322.9	2313.09	250.69	-189.59	0.00	314.31			
2400.00	17.00	322.9	2360.91	262.35	-198.41	0.00	328.93			
2450.00	17.00	322.9	2408.72	274.01	-207.23	0.00	343.55			
2500.00	17.00	322.9	2456.54	285.67	-216.05	0.00	358.17			
2550.00	17.00	322.9	2504.35	297.33	-224.87	0.00	372.78			
2600.00	17.00	322.9	2552.17	308.99	-233.68	0.00	387.40			
2650.00	17.00	322.9	2599.98	320.65	-242.50	0.00	402.02			
2700.00	17.00	322.9	2647.80	332.30	-251.32	0.00	416.64			
2750.00	17.00	322.9	2695.61	343.96	-260.14	0.00	431.26			
2800.00	17.00	322.9	2743.43	355.62	-268.96	0.00	445.88			
2850.00	17.00	322.9	2791.24	367.28	-277.77	0.00	460.50			
2900.00	17.00	322.9	2839.06	378.94	-286.59	0.00	475.11			
2950.00	17.00	322.9	2886.87	390.60	-295.41	0.00	489.73			
3000.00	17.00	322.9	2934.69	402.26	-304.23	0.00	504.35			
3050.00	17.00	322.9	2982.51	413.92	-313.05	0.00	518.97			
3100.00	17.00	322.9	3030.32	425.58	-321.86	0.00	533.59			
3150.00	17.00	322.9	3078.14	437.24	-330.68	0.00	548.21			
3200.00	17.00	322.9	3125.95	448.90	-339.50	0.00	562.83			
3250.00	17.00	322.9	3173.77	460.56	-348.32	0.00	577.44			
3300.00	17.00	322.9	3221.58	472.22	-357.14	0.00	592.06			

16-04Q, Plan 1

16-04Q, Plan 1									
Operator		Units		14:00 Monday, October 28, 2013 Page 3 of 4					
Field		County		Vertical Section Azimuth 322.9					
Well Name 16-04Q		State		Survey Calculation Method Minimum Curvature					
Plan 1		Country		Database Access					
Location SHL: 797' FNL & 571' FWL BHL, SEC 17: 10' FEL & 10' FNL				MapZone		Lat Long Ref			
Site		UWI		SurfaceX		Surface Long			
Slot Name		API		SurfaceY		Surface Lat			
Well Number				Z Datum					
Project				Surface Z		Ground Level			
DIRECTIONAL WELL PLAN									
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN* SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft
3350.00	17.00	322.9	3269.40	483.88	-365.95	0.00	606.68		
3400.00	17.00	322.9	3317.21	495.54	-374.77	0.00	621.30		
3450.00	17.00	322.9	3365.03	507.20	-383.59	0.00	635.92		
3500.00	17.00	322.9	3412.84	518.86	-392.41	0.00	650.54		
3550.00	17.00	322.9	3460.66	530.52	-401.23	0.00	665.16		
3600.00	17.00	322.9	3508.47	542.18	-410.05	0.00	679.77		
3650.00	17.00	322.9	3556.29	553.84	-418.86	0.00	694.39		
3700.00	17.00	322.9	3604.10	565.50	-427.68	0.00	709.01		
3750.00	17.00	322.9	3651.92	577.16	-436.50	0.00	723.63		
*** START DROP (at MD = 3770.00)									
3770.00	17.00	322.9	3671.04	581.82	-440.03	0.00	729.48		
3800.00	16.70	322.9	3699.76	588.75	-445.27	1.00	738.17		
3850.00	16.20	322.9	3747.71	600.05	-453.81	1.00	752.33		
3900.00	15.70	322.9	3795.78	611.01	-462.10	1.00	766.07		
3950.00	15.20	322.9	3843.98	621.63	-470.14	1.00	779.39		
4000.00	14.70	322.9	3892.29	631.92	-477.92	1.00	792.29		
4050.00	14.20	322.9	3940.70	641.87	-485.44	1.00	804.77		
4100.00	13.70	322.9	3989.23	651.48	-492.71	1.00	816.82		
4150.00	13.20	322.9	4037.86	660.76	-499.73	1.00	828.45		
4200.00	12.70	322.9	4086.59	669.70	-506.49	1.00	839.66		
4250.00	12.20	322.9	4135.41	678.29	-512.99	1.00	850.43		
4300.00	11.70	322.9	4184.33	686.55	-519.23	1.00	860.79		
4350.00	11.20	322.9	4233.33	694.47	-525.22	1.00	870.71		
4400.00	10.70	322.9	4282.42	702.04	-530.95	1.00	880.21		
4450.00	10.20	322.9	4331.59	709.28	-536.42	1.00	889.28		
4500.00	9.70	322.9	4380.84	716.17	-541.63	1.00	897.92		
4550.00	9.20	322.9	4430.16	722.71	-546.58	1.00	906.13		
4600.00	8.70	322.9	4479.55	728.92	-551.28	1.00	913.91		
4650.00	8.20	322.9	4529.01	734.78	-555.71	1.00	921.25		
4700.00	7.70	322.9	4578.53	740.29	-559.88	1.00	928.17		
4750.00	7.20	322.9	4628.10	745.46	-563.79	1.00	934.65		
4800.00	6.70	322.9	4677.74	750.29	-567.44	1.00	940.70		
4850.00	6.20	322.9	4727.42	754.77	-570.83	1.00	946.32		
4900.00	5.70	322.9	4777.15	758.90	-573.95	1.00	951.50		
4950.00	5.20	322.9	4826.92	762.69	-576.82	1.00	956.25		

16-04Q, Plan 1

16-04Q, Plan 1										
Operator		Units		14:00 Monday, October 28, 2013 Page 4 of 4						
Field		County		Vertical Section Azimuth 322.9						
Well Name 16-04Q		State		Survey Calculation Method Minimum Curvature						
Plan 1		Country		Database Access						
Location SHL: 797' FNL & 571' FWL BHL, SEC 17: 10' FEL & 10' FNL				MapZone				Lat Long Ref		
Site		UWI		SurfaceX				Surface Long		
Slot Name		API		SurfaceY				Surface Lat		
Well Number				Z Datum						
Project				Surface Z				Ground Level		
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
5000.00	4.70	322.9	4876.74	766.13	-579.42	1.00	960.57			
5050.00	4.20	322.9	4926.59	769.23	-581.76	1.00	964.45			
5100.00	3.70	322.9	4976.47	771.97	-583.84	1.00	967.89			
5150.00	3.20	322.9	5026.38	774.37	-585.65	1.00	970.90			
5200.00	2.70	322.9	5076.31	776.43	-587.21	1.00	973.47			
5250.00	2.20	322.9	5126.27	778.13	-588.50	1.00	975.61			
5300.00	1.70	322.9	5176.24	779.49	-589.52	1.00	977.31			
5350.00	1.20	322.9	5226.22	780.50	-590.28	1.00	978.58			
5400.00	0.70	322.9	5276.21	781.16	-590.78	1.00	979.40			
5450.00	0.20	322.9	5326.21	781.47	-591.02	1.00	979.80			
*** END DROP (at MD = 5470.00)										
5470.00	0.00	0.0	5346.21	781.50	-591.04	1.00	979.83			
5500.00	0.00	0.0	5376.21	781.50	-591.04	0.00	979.83			
5550.00	0.00	0.0	5426.21	781.50	-591.04	0.00	979.83			
5600.00	0.00	0.0	5476.21	781.50	-591.04	0.00	979.83			
5650.00	0.00	0.0	5526.21	781.50	-591.04	0.00	979.83			
5700.00	0.00	0.0	5576.21	781.50	-591.04	0.00	979.83			
5750.00	0.00	0.0	5626.21	781.50	-591.04	0.00	979.83			
5800.00	0.00	0.0	5676.21	781.50	-591.04	0.00	979.83			
5850.00	0.00	0.0	5726.21	781.50	-591.04	0.00	979.83			
5900.00	0.00	0.0	5776.21	781.50	-591.04	0.00	979.83			
5950.00	0.00	0.0	5826.21	781.50	-591.04	0.00	979.83			
6000.00	0.00	0.0	5876.21	781.50	-591.04	0.00	979.83			
6050.00	0.00	0.0	5926.21	781.50	-591.04	0.00	979.83			
6100.00	0.00	0.0	5976.21	781.50	-591.04	0.00	979.83			
6150.00	0.00	0.0	6026.21	781.50	-591.04	0.00	979.83			
6200.00	0.00	0.0	6076.21	781.50	-591.04	0.00	979.83			
6250.00	0.00	0.0	6126.21	781.50	-591.04	0.00	979.83			
6300.00	0.00	0.0	6176.21	781.50	-591.04	0.00	979.83			
6350.00	0.00	0.0	6226.21	781.50	-591.04	0.00	979.83			
6400.00	0.00	0.0	6276.21	781.50	-591.04	0.00	979.83			
6450.00	0.00	0.0	6326.21	781.50	-591.04	0.00	979.83			
*** RTD (at MD = 6499.00)										
6499.00	0.00	0.0	6375.21	781.50	-591.04	0.00	979.83			

T5S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

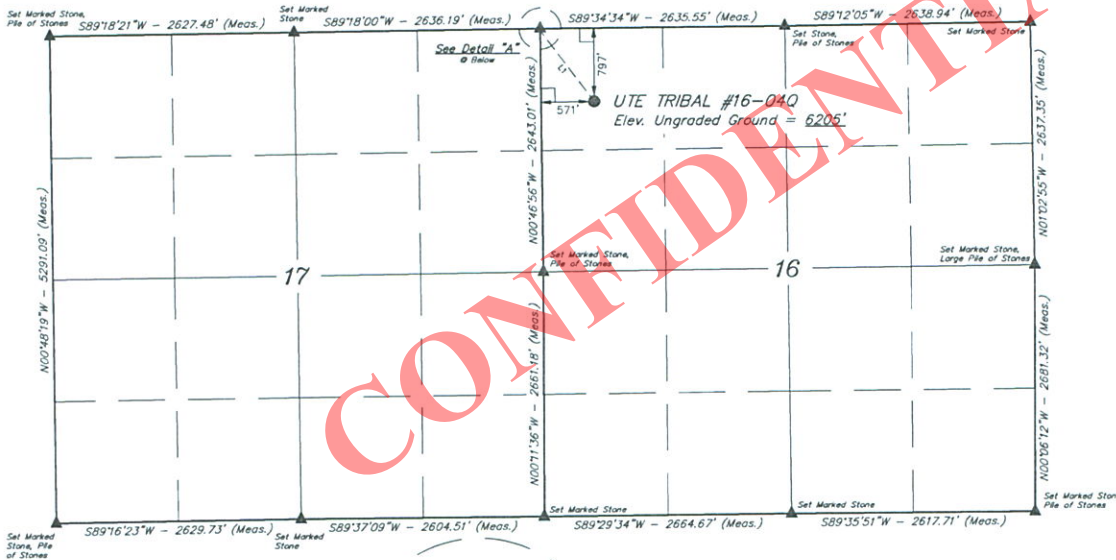
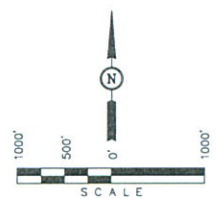
Well location, UTE TRIBAL #16-04Q, located as shown in the NW 1/4 NW 1/4 of Section 16, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 16, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6281.9 FEET.

BASIS OF BEARINGS

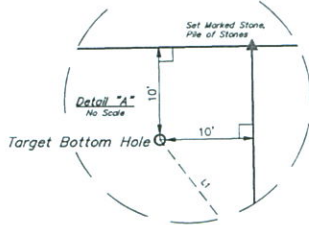
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



See Detail "A" @ Below

UTE TRIBAL #16-04Q
Elev. Ungraded Ground = 6205'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N37°04'39"W	960.95'



LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE SURVEY WAS CONDUCTED IN THE FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

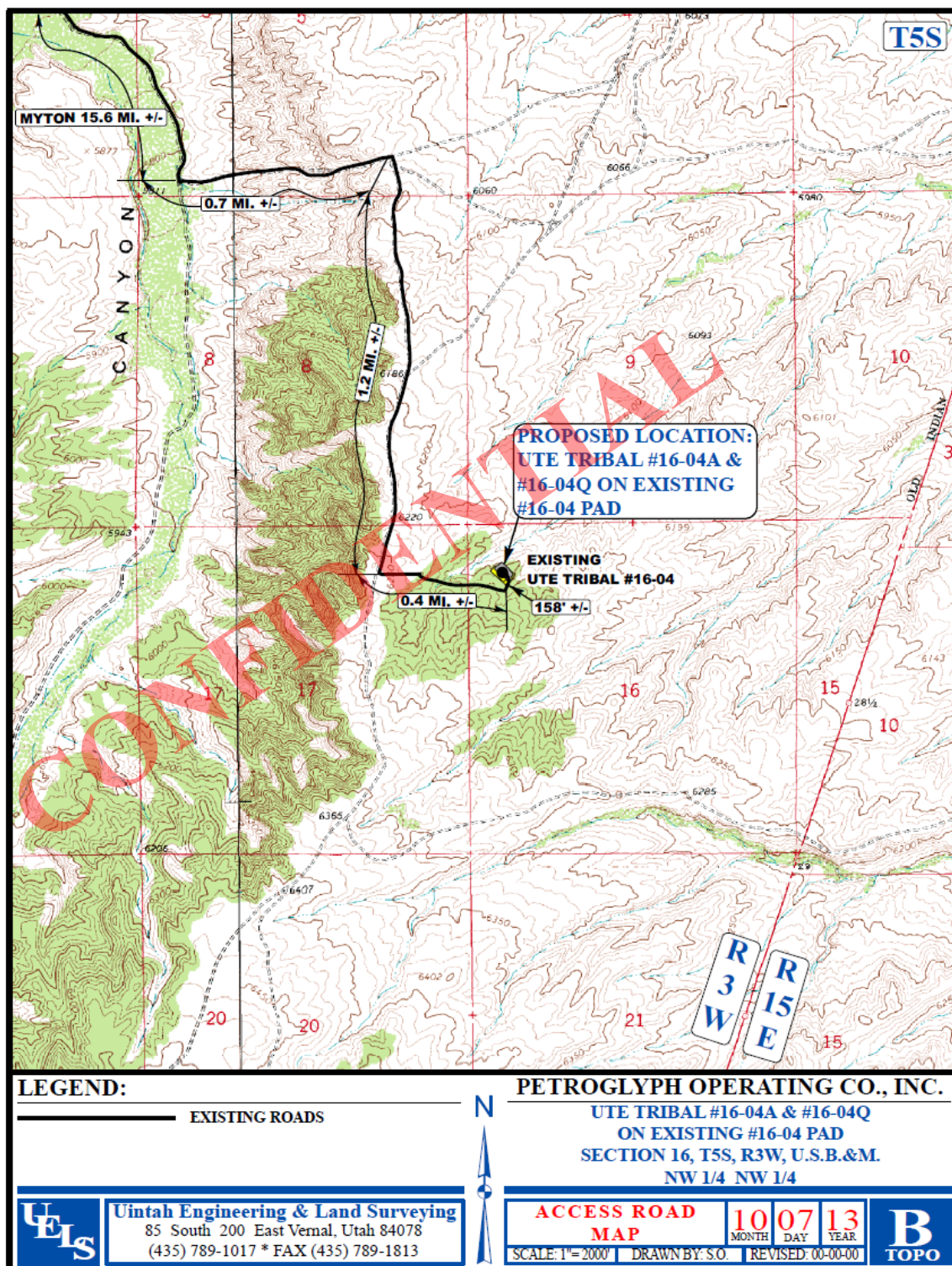
REGISTERED LAND SURVEYOR
REGISTRATION NO. 441319
STATE OF UTAH

REVISED: 11-06-13

UNTAEH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL UTAH 84078
(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	09-25-13	10-03-13
PARTY	REFERENCES	FILE
T.A. J.L. S.F.	G.L.O. PLAT	
WEATHER	PETROGLYPH OPERATING CO., INC.	
WARM		

HAD. B3 (TARGET BOTTOM HOLE)	HAD. B3 (SURFACE LOCATION)
LATITUDE = 40°03'13.80" (40.053778)	LATITUDE = 40°03'05.78" (40.051606)
LONGITUDE = 110°41'44.75" (110.237431)	LONGITUDE = 110°41'07.28" (110.235356)
HAD. 22 (TARGET BOTTOM HOLE)	HAD. 22 (SURFACE LOCATION)
LATITUDE = 40°03'13.74" (40.053817)	LATITUDE = 40°03'05.92" (40.051644)
LONGITUDE = 110°41'42.19" (110.236719)	LONGITUDE = 110°41'04.73" (110.234647)



PETROGLYPH OPERATING CO., INC.
P.O. BOX 607
ROOSEVELT, UTAH 84066

October 30, 2013

Ms. Diana Mason
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11

Ute Tribal 16-04Q: 797' FNL & 571' FWL, NW/NW, Sec. 16, (Surface Hole)
10' FNL & 10' FEL, NE/NE, Sec. 17, (Bottom Hole)
T5S, R3W, U.S.B.&M., Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on October 30, 2013, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 30-02O is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and drilling directionally from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Ed Trotter,
Agent
P.O. Box 1910
Vernal, UT 84078
Phone: (435)789-4120
Fax: (435)789-1420
E-mail: edtrotter@easilink.com

RECEIVED: October 31, 2013

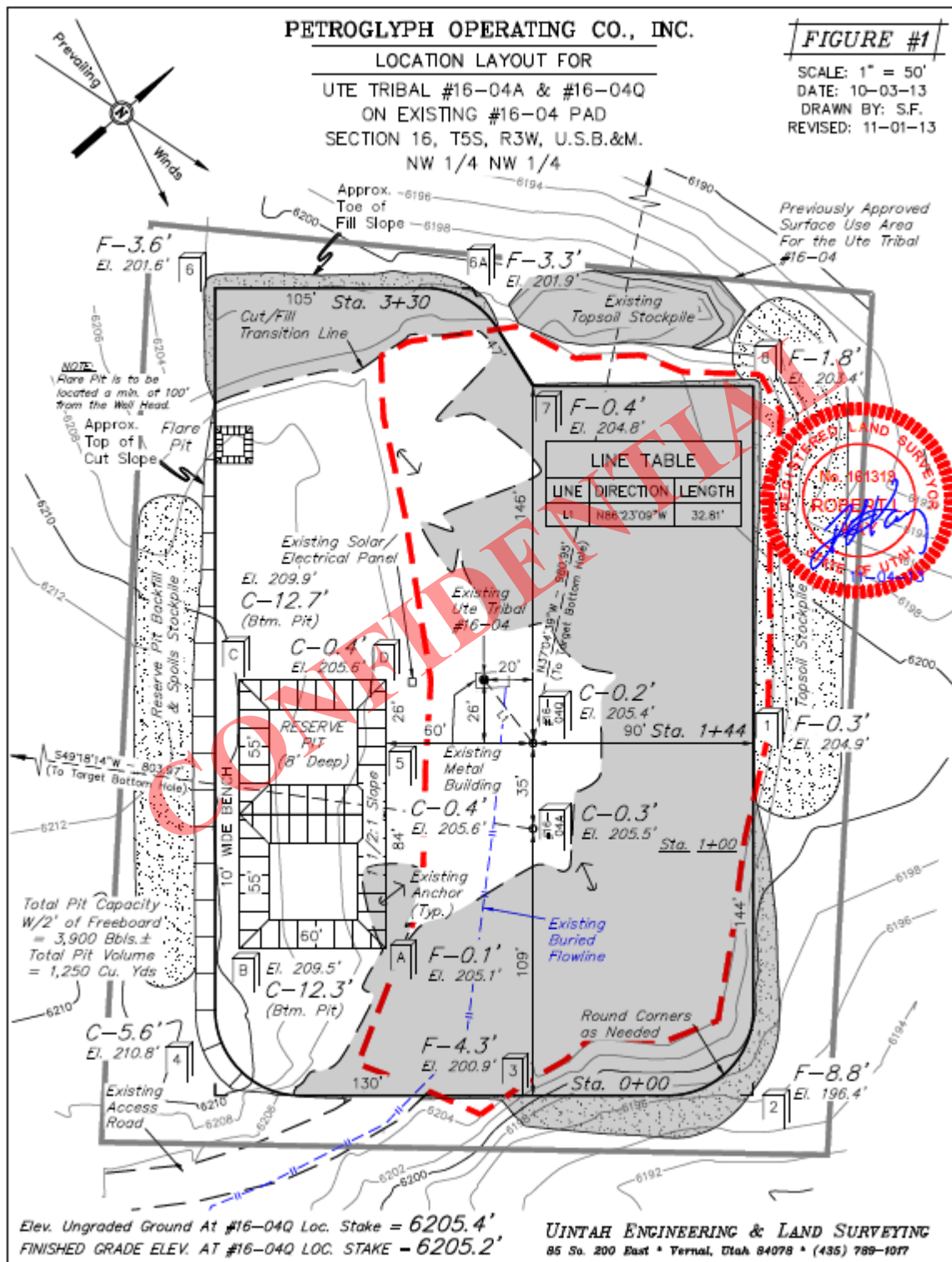
Certification

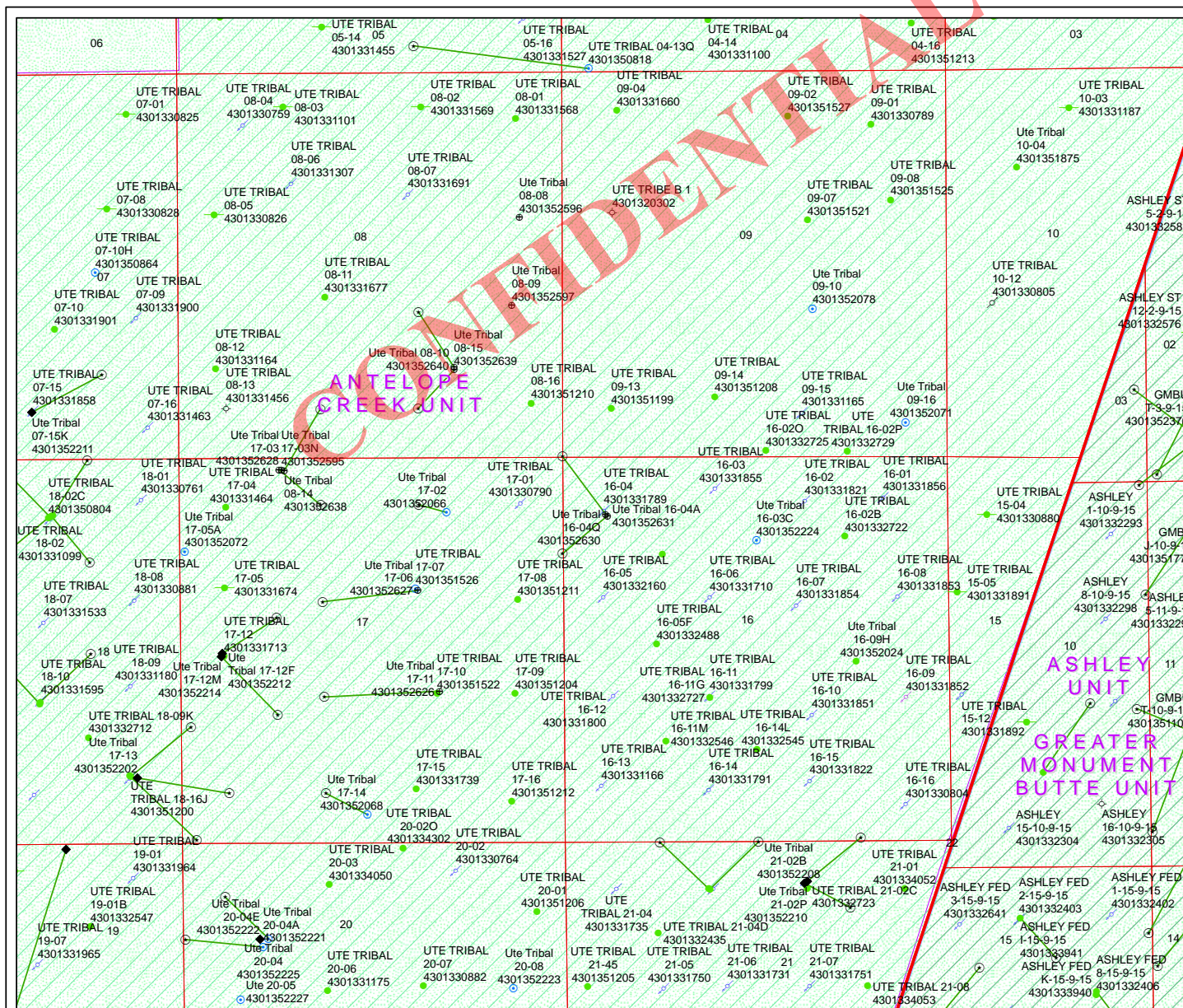
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 16-04Q Well, located in the NW/NW of Section 16, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3511**; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #LPM4138335.

Date

Ed Trotter, as Agent for
Petroglyph Operating Co., Inc.





API Number: 4301352630

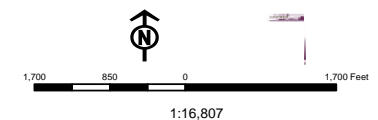
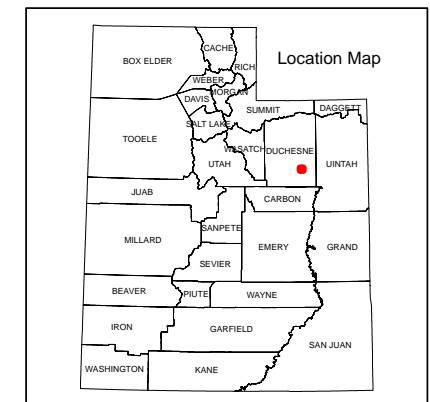
Well Name: Ute Tribal 16-04Q

Township: T05.0S Range: R03.0W Section: 16 Meridian: U

Operator: PETROGLYPH OPERATING CO

Map Prepared: 11/6/2013
Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
APD - Approved Permit	●	ACTIVE	■
DRL - Spudded (Drilling Commenced)	○	EXPLORATORY	■
GIW - Gas Injection	★	GAS STORAGE	■
GS - Gas Storage	★	NF PP OIL	■
LOC - New Location	⊕	NF SECONDARY	■
OPS - Operation Suspended	⊖	PI OIL	■
PA - Plugged Abandoned	⊗	PP GAS	■
PGW - Producing Gas Well	⊕	PP GEOTHERMAL	■
POW - Producing Oil Well	⊕	PP OIL	■
SGW - Shut-in Gas Well	⊖	SECONDARY	■
SGW - Shut-in Oil Well	⊖	TERMINATED	■
TA - Temp. Abandoned	⊖		
TW - Test Well	○	Fields	
WDW - Water Disposal	○	Status	
WW - Water Injection Well	○	Unknown	■
WSW - Water Supply Well	●	ABANDONED	■
		ACTIVE	■
		COMBINED	■
		INACTIVE	■
		STORAGE	■
		TERMINATED	■



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/31/2013

API NO. ASSIGNED: 43013526300000

WELL NAME: Ute Tribal 16-04Q

OPERATOR: PETROGLYPH OPERATING CO (N3800)

PHONE NUMBER: 435 789-4120

CONTACT: Ed Trotter

PROPOSED LOCATION: NWNW 16 050S 030W

Permit Tech Review: ☒

SURFACE: 0797 FNL 0571 FWL

Engineering Review: ☐

BOTTOM: 0010 FNL 0010 FEL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.05155

LONGITUDE: -110.23545

UTM SURF EASTINGS: 565213.00

NORTHINGS: 4433759.00

FIELD NAME: ANTELOPE CREEK

LEASE TYPE: 2 - Indian

LEASE NUMBER: 1420H623511

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: INDIAN - LPM4138336☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 43-8342☐ RDCC Review:☐ Fee Surface Agreement☐ Intent to Commingle

Commingling Approved

LOCATION AND SITING:

☐ R649-2-3.

Unit: ANTELOPE CREEK

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 214-2

Effective Date: 6/9/2000

Siting: Suspends General Siting

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason
15 - Directional - dmason

RECEIVED: November 07, 2013



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Ute Tribal 16-04Q
API Well Number: 43013526300000
Lease Number: 1420H623511
Surface Owner: INDIAN
Approval Date: 11/7/2013

Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Avenue, Ste 500, Boise, ID 83703

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 214-2. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil &

Gas website
at <http://oilgas.ogm.utah.gov>

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 06 2013

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

5. Lease Serial No.
1420H623511

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.
1420H6246508. Lease Name and Well No.
UTE TRIBAL 16-04Q

9. API Well No.

10. Field and Pool, or Exploratory
ANTELOPE CREEK11. Sec., T., R., M., or Blk. and Survey or Area
Sec 16 T5S R3W Mer UBM12. County or Parish
DUCHESNE13. State
UT

17. Spacing Unit dedicated to this well

20. BLM/BIA Bond No. on file
LPM413833523. Estimated duration
45 DAYS1a. Type of Work: ☒ DRILL ☐ REENTER

CONFIDENTIAL

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone2. Name of Operator
PETROGLYPH OPERATING CO., INC. Contact: ED H TROTTER
Email: edtrotter@easilink.com3a. Address
P.O. BOX 607
ROOSEVELT, UT 840663b. Phone No. (include area code)
Ph: 435-789-4120
Fx: 435-789-1420

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface NWNW 797FNL 571FWL

At proposed prod. zone NENE 10FNL 10FEL

14. Distance in miles and direction from nearest town or post office*
16.7 MILES SOUTHWEST OF MYTON, UTAH15. Distance from proposed location to nearest property or
lease line, ft. (Also to nearest drig. unit line, if any)
57116. No. of Acres in Lease
640.0018. Distance from proposed location to nearest well, drilling,
completed, applied for, on this lease, ft.
3919. Proposed Depth
6499 MD
6375 TVD21. Elevations (Show whether DF, KB, RT, GL, etc.)
6205 GL22. Approximate date work will start
12/15/2013

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature
(Electronic Submission)Name (Printed/Typed)
LESTER FARNSWORTH Ph: 435-722-2531Date
10/31/2013Title
DISTRICT MANAGER

Approved by (Signature)

Name (Printed/Typed)
Jerry Kenczka

JUL 01 2014

Title
Assistant Field Manager
Lands & Mineral ResourcesOffice
VERNAL FIELD OFFICEApplication approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

JUL 07 2014

Additional Operator Remarks (see next page)

NOTICE OF APPROVAL

Electronic Submission #225168 verified by the BLM Well Information System
For PETROGLYPH OPERATING CO., INC., sent to the Vernal
committed to AFMSS for processing by LESLIE BUHLER on 11/12/2013 ()

DIV. OF OIL, GAS & MINING

UDOGM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: PETROGLYPH OPERATING CO INC
Well No: UTE TRIBAL 16-04Q
API No: 43-013-52630

Location:
Lease No:
Agreement:

NWNW, Sec. 16, T5S, R3W
14-20-H62-3511
N/A

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity
(Notify Ute Tribe Energy & Minerals
Dept. and BLM Environmental
Scientist)

- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.

Construction Completion
(Notify Ute Tribe Energy & Minerals
Dept. and BLM Environmental
Scientist)

- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.

Spud Notice
(Notify BLM Petroleum Engineer)

- Twenty-Four (24) hours prior to spudding the well.

Casing String & Cementing
(Notify BLM Supv. Petroleum Tech.)

- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov.

BOP & Related Equipment Tests
(Notify BLM Supv. Petroleum Tech.)

- Twenty-Four (24) hours prior to initiating pressure tests.

First Production Notice
(Notify BLM Petroleum Engineer)

- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

Company/Operator: Petroglyph

Well Name & Numbers: Ute Tribal 16-04A and 16-04Q

CONDITIONS OF APPROVAL:

- All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- The conditions of approval, as set forth by those owners and/or agencies, shall be adhered to.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

apd_coa Downhole _Ptyph

- Production casing cement shall be brought up and into the surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 75 feet.
- All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- applicable wells:
 - _ptyph
 - Ute Tribal
- 1420H623511
- 16-04A
- 16-04Q
- 1420H624633
- 17-06
- 17-11
- 1420H623514
- 19-09H

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be

reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623511
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		8. WELL NAME and NUMBER: Ute Tribal 16-04Q
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703		9. API NUMBER: 43013526300000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0797 FNL 0571 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 16 Township: 05.0S Range: 03.0W Meridian: U		9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
		COUNTY: DUCHESNE
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 7/15/2014			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This well was spud on 7/15/2014 at approximately 7:00 A.M. Using a Bucket Rig provided by Craig's Roustabout Service, Vernal Utah, we set 60' of 16" Conductor. For additional information please contact our staff at 435-722-2531.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 July 16, 2014

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A		DATE 7/15/2014

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Pro Petro
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number Ute Tribal 16-04Q
Qtr/Qtr NWNW Section 16 Township 5S Range 3W
Lease Serial Number 14-20-H62-3511
API Number 43-013-52630

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 7/16/2014 7:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

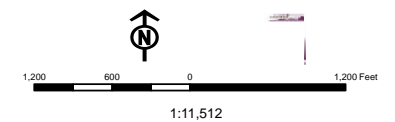
Date/Time _____ AM ☐ PM ☐

Remarks We plant to run +/- 500' of 8-5/8" J-55 Surface Casing at the time indicated. (Sent 7/15/2014 @ 3:45 P.M.)

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623511
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 16-04AA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0797 FNL 0571 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 16 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013526300000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/29/2014 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR <input checked="" type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100%;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Please change this well's name to Ute Tribal 16-04AA and see attached Revised 9 Point Drilling Plan, Revised Directional Plan, Revised Directional Plat & Revised Well Site Layout Diagram. The revisions to our downhole program and change in well name are being made to correct the drilling of the wrong directional plan out of the surface casing of the well referenced above. The BHL reached was actually designated for a well ending in "A" but was drilled from the surface location of the well referenced above. Please contact our staff if you have any questions or need any additional materials.		
NAME (PLEASE PRINT) Rodrigo Jurado		PHONE NUMBER 435 722-5302
SIGNATURE N/A		DATE 7/29/2014

Approved by the
August 11, 2014
Oil, Gas and Mining

Date: _____
By:



T5S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

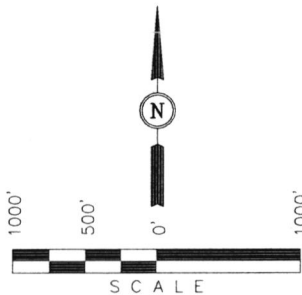
Well location, UTE TRIBAL #16-04AA, located as shown in the NW 1/4 NW 1/4 of Section 16, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 16, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6281.9 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

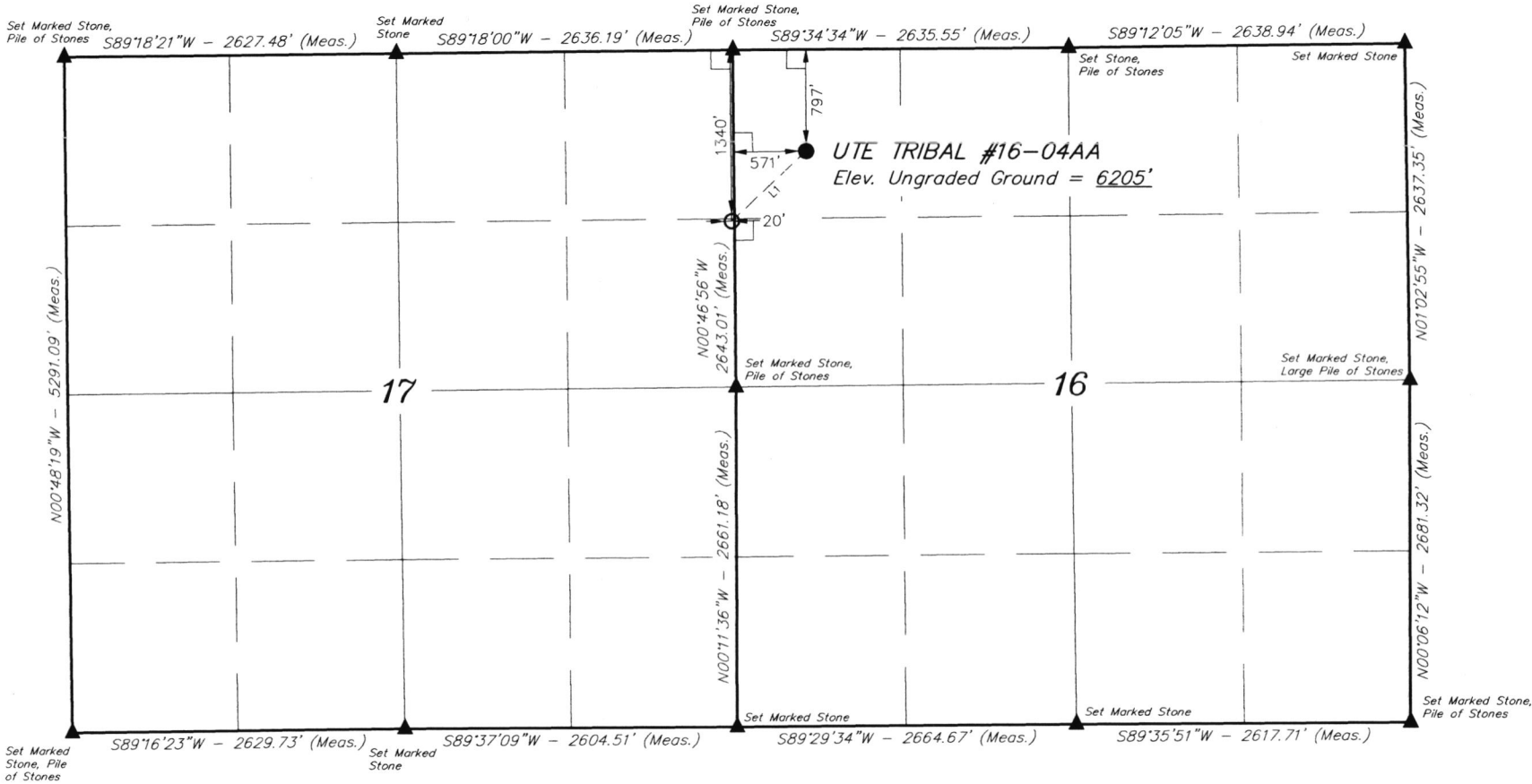
THIS IS TO CERTIFY THAT THE ABOVE SURVEY WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REV: 07-25-14 J.J.
REVISED: 11-06-13

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 09-25-13	DATE DRAWN: 10-03-13
PARTY T.A. J.L. S.F.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE PETROGLYPH OPERATING CO., INC.	



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S46°49'02"W	799.88'

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°03'00.46" (40.050128)	LATITUDE = 40°03'05.78" (40.051606)
LONGITUDE = 110°14'14.88" (110.237467)	LONGITUDE = 110°14'07.28" (110.235356)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°03'00.60" (40.050167)	LATITUDE = 40°03'05.92" (40.051644)
LONGITUDE = 110°14'12.33" (110.236758)	LONGITUDE = 110°14'04.73" (110.234647)

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Formation		Subsea	TVD	MD
Rig KB=~13' above GGL		6232	0	0
Surface Formation = Uinta				
Uinta		6219	13	13
Green River		4722	1510	1516
Trona		3381	2851	2908
Mahogany Shale		3235	2997	3059
"B" Marker	Waterflood Unit Interval	2140	4092	4184
"X" Marker		1660	4572	4666
Douglas Creek Marker		1518	4714	4808
"B" Limestone		1127	5105	5199
Base Castle Peak Limestone		555	5677	5771
BSCARB		157	6075	6169
Wasatch		-120	NDE	NDE
Formation at TD: Green River	Rig TD	121	6111	6211

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Substance	Formation	Subsea	TVD	MD
Base of moderately saline ground water*	Uinta	6000	232	232
Oil/Gas	Douglas Creek	1518	4714	4808
Oil/Gas	Castle Peak	555	5677	5771

Any water encountered during drilling shall be sampled, analyzed and reported to BLM, Vernal office using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

Flow rate (or blowtest)	Temperature	pH	TDS
Dissolved Iron	Dissolved Magnesium	Dissolved Bicarb.	Dissolved Sulfate
Dissolved Calcium	Dissolved Sodium	Dissolved Carbonate	Dissolved Chloride

All depths through the "Base of moderately saline ground water"*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

*Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

3. PROPOSED CASING PROGRAM:

String	Hole	Casing	Top - MD	Bottom - MD	Weight lb/ft	Grade	Thread
Conductor	20"	14"	surface	53'	steel	Cond'r	none
Surface	12-1/4"	8-5/8"	surface	493'	24	J-55	STC
Production	7-7/8"	5-1/2"	surface	6211'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tensile
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	244,000 lb
Production	7-7/8"	5-1/2"	4,040 psi	4,810 psi	248,000 lb

- All casing will be new or inspected.
- The surface and production strings shall have a minimum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 4184' MD.

4. PROPOSED CEMENTING PROGRAM:

String	Top Bottom	Cement Description	Sacks Vol (ft ³)	Excess	Weight (ppg)	Yield (ft ³ /sk)
Conductor	0 53	Construction Grade Cement	Sufficient volumes to grout Conductor			
Surface	0 493	Class G +2% CaCl ₂ +0.25 lb/sk Cello Flake	226 264	30%	15.8	1.17
Production Lead	0 4184	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	491 943	30%	12.5	1.92
Production Tail	4184 6211	EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM)	313 457	30%	13.4	1.46

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary cementing operation the cement does not circulate to surface, a remedial cementing operation shall be performed only if necessary to lift cement above the Trona at 2908' MD.

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

BOPE TESTING PROCEDURE:

- The BOPE shall be tested by a professional tester to conform to Onshore Order #2.

6. MUD PROGRAM:

A. SURFACE HOLE

- The surface hole will be drilled with an air/mist system from 0' to 493'. All cuttings shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-off valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator requests the following variances from Onshore Order 2 part E during drilling of the surface hole. Operator will use air drilling techniques only on surface hole:
 - Operator requests a variance to regulations requiring the blooie line discharge to be 100' from the wellbore. Due to reduced location size, the blooie line discharge will be approximately 75' from the wellbore and securely anchored.
 - Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. A mister shall be on the end of the blooie line.
 - Operator requests a variance to regulations requiring compressors be located in the opposite direction from the blooie line; a minimum of 100' from the wellbore. Due to the reduced location size, the compressors shall be located as close as is reasonable to the opposite direction from the blooie line and 75' from the wellbore.
 - Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl shall be utilized on the diverter system in place of a BOPE.

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

B. PRODUCTION HOLE

- The production hole shall be drilled with a freshwater polymer system from 493' to 6211'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.8 lbs/gal. although mud weight up to 10lbs/gal may be used if necessary to prevent wellbore wall instability due to the planned inclination of the well.
- All cuttings and circulating medium shall be directed into the reserve pit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to allow for the mudweight to be raised to 10lbs/gal should need arise.
- During drilling operations, pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location. Operator does not plan on using a gas detector on the mud return due to the fact that any abnormal pressure is the result of offset water injection.

C. HAZARDOUS MATERIALS AND POLLUTANTS

- Chromate additives **shall NOT** be used in the mud system on Indian lands without prior DOGM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

7. EVALUATION PROGRAM:

Logs: Triple Combo TD to base of surface casing (AIT, DSN, CDL)
Base of surface casing to surface (GR only)

Cores: None planned

DST: None planned

Testing: Operator plans no testing until the completion phase of the well.

8. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

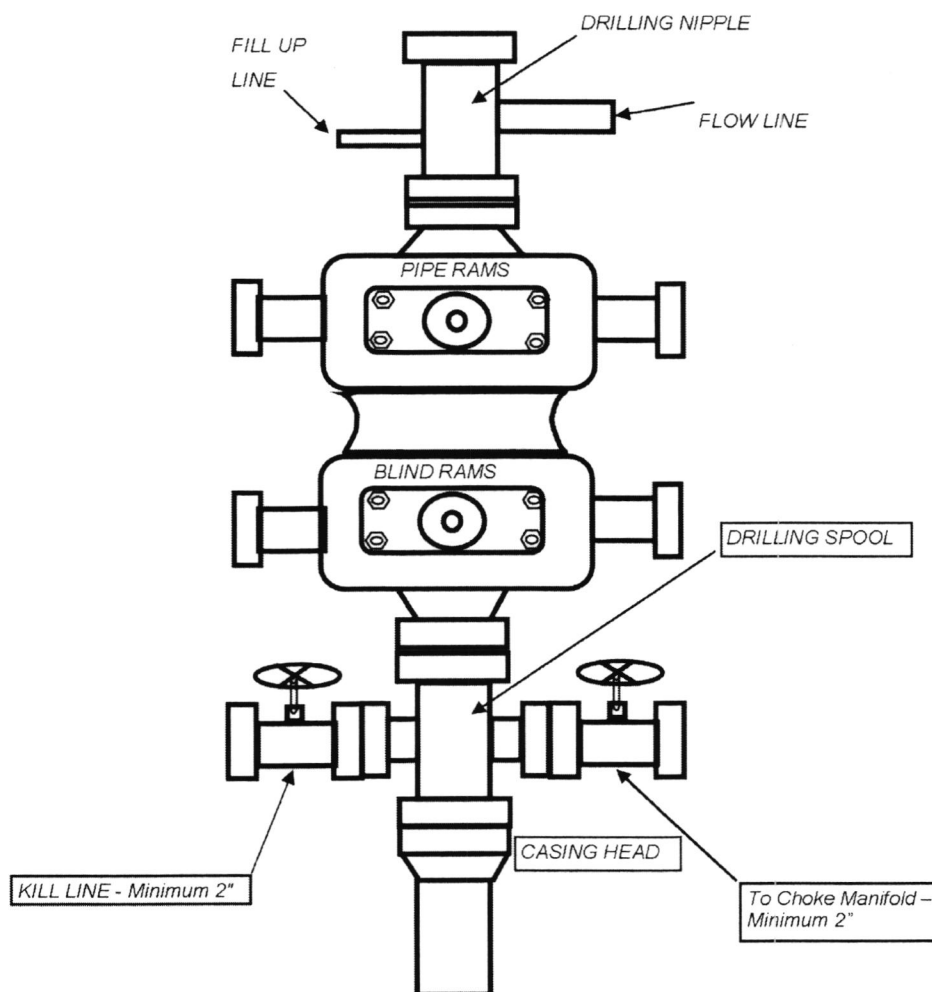
- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H₂S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1553 PSI (0.25 PSI/ft gradient).
- This well is in the vicinity of active injection wells. Nearby active injection can cause pressures up to a 0.433 PSI/ft gradient (2689 PSI).

9. DIRECTIONAL WELL PLAN:

- Well shall be drilled directionally in order to limit surface disturbance.
- A Positive Displacement Motor with a bent sub of 1.25° to 1.75° will be used to control well path.
- A directional survey shall be taken at least one (1) time per 100' of drilling.
- Anti-collision equipment will not be used as there are no existing wells in the vicinity of the proposed well path.
- While cutting the Waterflood Unit Interval from 4184' to 6169', the actual well path may be allowed to vary up to 100' horizontally from plan in order to prevent excessive slide drilling. Above and below the Waterflood Unit Interval, variances in excess 100' horizontally from plan may be allowed.
- Directional drilling plan is attached.

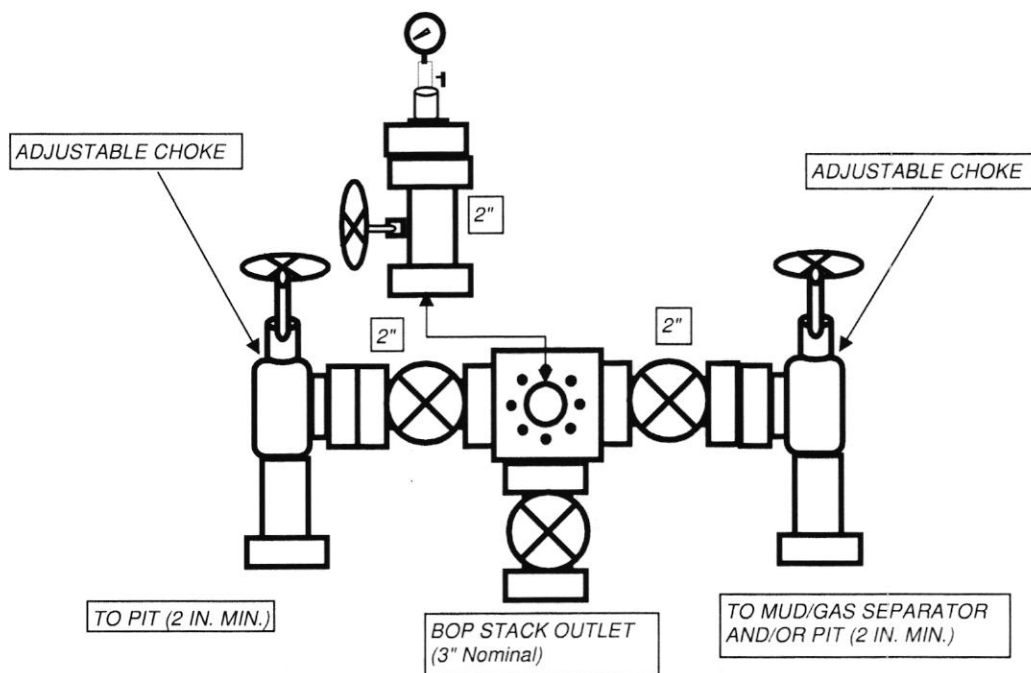
CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

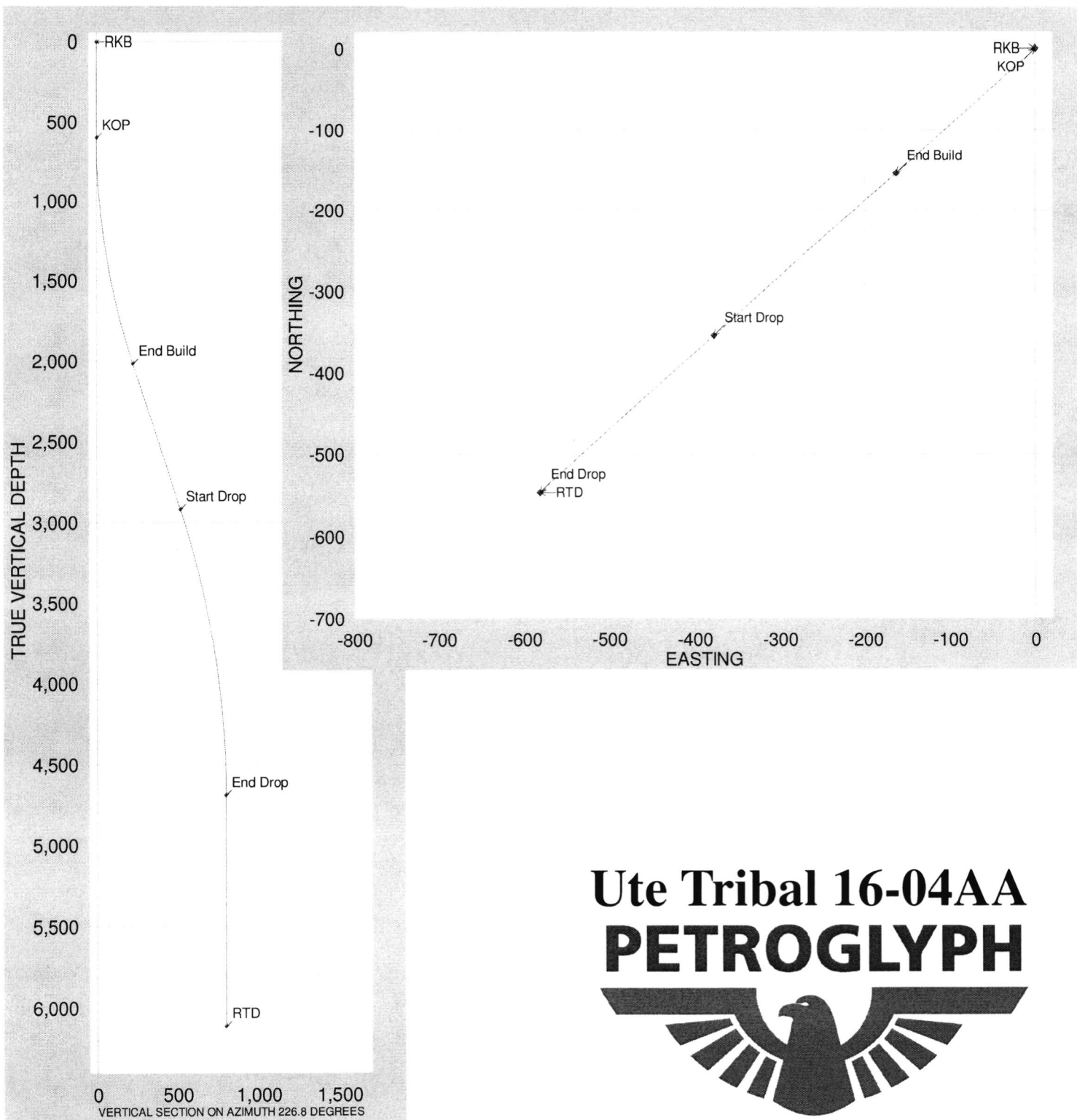
TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER



CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 16-04AA
NW NW, SEC 16, T5S, R3W
DUCHESNE COUNTY, UTAH

TYPICAL 2,000 p.s.i. CHOKE MANIFOLD





Ute Tribal 16-04AA PETROGLYPH



#	Reference	Type	MD	Inc	Azi	TVD	N	E	DLS	Vert S
0	RKB	Tie Point	0.00	0.00	0.00	0.00	0.00	0.00		0.00
1	KOP	Vertical	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00
2	End Build	Build	2040.00	18.00	226.80	2016.43	-153.57	-163.54	1.25	224.34
3	Start Drop	Tangent	2990.00	18.00	226.80	2919.93	-354.53	-377.54	0.00	517.91
4	End Drop	Drop	4790.00	0.00	0.00	4690.47	-546.50	-581.96	1.00	798.33
5	RTD	Vertical	6211.00	0.00	0.00	6111.47	-546.50	-581.96	0.00	798.33

SES - Stoner Engineering Software

16-04AA Sundry, Plan 1

Operator	Units feet, %/100ft	10:15 Monday, July 28, 2014 Page 1 of 4
Field	County	Vertical Section Azimuth 226.8
Well Name 16-04AA Sundry	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access

Location	MapZone	Lat Long Ref
Site	SurfaceX	Surface Long
Slot Name	SurfaceY	Surface Lat
Well Number	Z Datum	
Project	Surface Z	Ground Level

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft

*** RKB (at MD = 0.00)

0.00	0.00	0.0	0.00	0.00	0.00		0.00			
50.00	0.00	0.0	50.00	0.00	0.00	0.00	0.00			
100.00	0.00	0.0	100.00	0.00	0.00	0.00	0.00			
150.00	0.00	0.0	150.00	0.00	0.00	0.00	0.00			
200.00	0.00	0.0	200.00	0.00	0.00	0.00	0.00			
250.00	0.00	0.0	250.00	0.00	0.00	0.00	0.00			
300.00	0.00	0.0	300.00	0.00	0.00	0.00	0.00			
350.00	0.00	0.0	350.00	0.00	0.00	0.00	0.00			
400.00	0.00	0.0	400.00	0.00	0.00	0.00	0.00			
450.00	0.00	0.0	450.00	0.00	0.00	0.00	0.00			
500.00	0.00	0.0	500.00	0.00	0.00	0.00	0.00			
550.00	0.00	0.0	550.00	0.00	0.00	0.00	0.00			

*** KOP (at MD = 600.00)

600.00	0.00	0.0	600.00	0.00	0.00	0.00	0.00			
650.00	0.63	226.8	650.00	-0.19	-0.20	1.25	0.27			
700.00	1.25	226.8	699.99	-0.75	-0.80	1.25	1.09			
750.00	1.88	226.8	749.97	-1.68	-1.79	1.25	2.45			
800.00	2.50	226.8	799.94	-2.99	-3.18	1.25	4.36			
850.00	3.13	226.8	849.88	-4.67	-4.97	1.25	6.82			
900.00	3.75	226.8	899.79	-6.72	-7.15	1.25	9.81			
950.00	4.38	226.8	949.66	-9.14	-9.74	1.25	13.36			
1000.00	5.00	226.8	999.49	-11.94	-12.71	1.25	17.44			
1050.00	5.63	226.8	1049.28	-15.11	-16.09	1.25	22.07			
1100.00	6.25	226.8	1099.01	-18.65	-19.86	1.25	27.24			
1150.00	6.88	226.8	1148.68	-22.56	-24.03	1.25	32.96			
1200.00	7.50	226.8	1198.29	-26.84	-28.59	1.25	39.21			
1250.00	8.13	226.8	1247.82	-31.50	-33.54	1.25	46.01			
1300.00	8.75	226.8	1297.28	-36.52	-38.89	1.25	53.35			
1350.00	9.38	226.8	1346.66	-41.91	-44.63	1.25	61.22			
1400.00	10.00	226.8	1395.94	-47.67	-50.76	1.25	69.64			
1450.00	10.63	226.8	1445.14	-53.80	-57.29	1.25	78.59			
1500.00	11.25	226.8	1494.23	-60.29	-64.20	1.25	88.07			
1550.00	11.88	226.8	1543.21	-67.15	-71.51	1.25	98.10			
1600.00	12.50	226.8	1592.09	-74.38	-79.20	1.25	108.65			
1650.00	13.13	226.8	1640.84	-81.97	-87.29	1.25	119.74			

SES - Stoner Engineering Software

16-04AA Sundry, Plan 1

Operator	Units feet, %/100ft	10:15 Monday, July 28, 2014 Page 2 of 4
Field	County	Vertical Section Azimuth 226.8
Well Name 16-04AA Sundry	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access

Location	MapZone	Lat Long Ref
Site	SurfaceX	Surface Long
Slot Name	SurfaceY	Surface Lat
Well Number	Z Datum	
Project	Surface Z	Ground Level

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
1700.00	13.75	226.8	1689.47	-89.92	-95.76	1.25	131.36			
1750.00	14.38	226.8	1737.97	-98.24	-104.61	1.25	143.51			
1800.00	15.00	226.8	1786.34	-106.92	-113.85	1.25	156.18			
1850.00	15.63	226.8	1834.56	-115.95	-123.48	1.25	169.39			
1900.00	16.25	226.8	1882.64	-125.35	-133.49	1.25	183.12			
1950.00	16.88	226.8	1930.57	-135.11	-143.88	1.25	197.37			
2000.00	17.50	226.8	1978.33	-145.22	-154.65	1.25	212.15			
*** END BUILD (at MD = 2040.00)										
2040.00	18.00	226.8	2016.43	-153.57	-163.54	1.25	224.34			
2050.00	18.00	226.8	2025.94	-155.69	-165.79	0.00	227.43			
2100.00	18.00	226.8	2073.49	-166.26	-177.05	0.00	242.88			
2150.00	18.00	226.8	2121.05	-176.84	-188.32	0.00	258.33			
2200.00	18.00	226.8	2168.60	-187.42	-199.58	0.00	273.78			
2250.00	18.00	226.8	2216.15	-197.99	-210.84	0.00	289.23			
2300.00	18.00	226.8	2263.70	-208.57	-222.11	0.00	304.68			
2350.00	18.00	226.8	2311.26	-219.15	-233.37	0.00	320.14			
2400.00	18.00	226.8	2358.81	-229.72	-244.63	0.00	335.59			
2450.00	18.00	226.8	2406.36	-240.30	-255.90	0.00	351.04			
2500.00	18.00	226.8	2453.92	-250.88	-267.16	0.00	366.49			
2550.00	18.00	226.8	2501.47	-261.46	-278.42	0.00	381.94			
2600.00	18.00	226.8	2549.02	-272.03	-289.68	0.00	397.39			
2650.00	18.00	226.8	2596.57	-282.61	-300.95	0.00	412.84			
2700.00	18.00	226.8	2644.13	-293.19	-312.21	0.00	428.29			
2750.00	18.00	226.8	2691.68	-303.76	-323.47	0.00	443.74			
2800.00	18.00	226.8	2739.23	-314.34	-334.74	0.00	459.19			
2850.00	18.00	226.8	2786.79	-324.92	-346.00	0.00	474.64			
2900.00	18.00	226.8	2834.34	-335.49	-357.26	0.00	490.10			
2950.00	18.00	226.8	2881.89	-346.07	-368.53	0.00	505.55			
*** START DROP (at MD = 2990.00)										
2990.00	18.00	226.8	2919.93	-354.53	-377.54	0.00	517.91			
3000.00	17.90	226.8	2929.45	-356.64	-379.78	1.00	520.99			
3050.00	17.40	226.8	2977.09	-367.02	-390.84	1.00	536.15			
3100.00	16.90	226.8	3024.87	-377.11	-401.58	1.00	550.89			
3150.00	16.40	226.8	3072.77	-386.92	-412.03	1.00	565.22			
3200.00	15.90	226.8	3120.80	-396.44	-422.16	1.00	579.13			

SES - Stoner Engineering Software

16-04AA Sundry, Plan 1

Operator		Units feet, %/100ft	10:15 Monday, July 28, 2014 Page 3 of 4
Field		County	Vertical Section Azimuth 226.8
Well Name 16-04AA Sundry		State	Survey Calculation Method Minimum Curvature
Plan 1		Country	Database Access
Location		MapZone	Lat Long Ref
Site		SurfaceX	Surface Long
Slot Name	UWI	SurfaceY	Surface Lat
Well Number	API	Z Datum	
Project		Surface Z	Ground Level

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
3250.00	15.40	226.8	3168.95	-405.67	-432.00	1.00	592.61			
3300.00	14.90	226.8	3217.21	-414.62	-441.52	1.00	605.68			
3350.00	14.40	226.8	3265.58	-423.27	-450.74	1.00	618.33			
3400.00	13.90	226.8	3314.06	-431.64	-459.65	1.00	630.55			
3450.00	13.40	226.8	3362.65	-439.72	-468.25	1.00	642.35			
3500.00	12.90	226.8	3411.34	-447.51	-476.54	1.00	653.72			
3550.00	12.40	226.8	3460.13	-455.00	-484.53	1.00	664.67			
3600.00	11.90	226.8	3509.01	-462.20	-492.20	1.00	675.20			
3650.00	11.40	226.8	3557.98	-469.12	-499.56	1.00	685.29			
3700.00	10.90	226.8	3607.03	-475.74	-506.61	1.00	694.96			
3750.00	10.40	226.8	3656.17	-482.06	-513.34	1.00	704.20			
3800.00	9.90	226.8	3705.39	-488.09	-519.77	1.00	713.01			
3850.00	9.40	226.8	3754.68	-493.83	-525.88	1.00	721.40			
3900.00	8.90	226.8	3804.05	-499.27	-531.67	1.00	729.35			
3950.00	8.40	226.8	3853.48	-504.42	-537.15	1.00	736.87			
4000.00	7.90	226.8	3902.97	-509.27	-542.32	1.00	743.96			
4050.00	7.40	226.8	3952.53	-513.83	-547.17	1.00	750.61			
4100.00	6.90	226.8	4002.14	-518.09	-551.71	1.00	756.83			
4150.00	6.40	226.8	4051.80	-522.05	-555.93	1.00	762.62			
4200.00	5.90	226.8	4101.51	-525.72	-559.83	1.00	767.98			
4250.00	5.40	226.8	4151.27	-529.09	-563.42	1.00	772.90			
4300.00	4.90	226.8	4201.07	-532.16	-566.69	1.00	777.39			
4350.00	4.40	226.8	4250.90	-534.94	-569.65	1.00	781.45			
4400.00	3.90	226.8	4300.77	-537.41	-572.29	1.00	785.06			
4450.00	3.40	226.8	4350.67	-539.59	-574.61	1.00	788.25			
4500.00	2.90	226.8	4400.59	-541.47	-576.61	1.00	790.99			
4550.00	2.40	226.8	4450.54	-543.06	-578.30	1.00	793.31			
4600.00	1.90	226.8	4500.51	-544.34	-579.66	1.00	795.18			
4650.00	1.40	226.8	4550.48	-545.33	-580.71	1.00	796.62			
4700.00	0.90	226.8	4600.47	-546.01	-581.44	1.00	797.63			
4750.00	0.40	226.8	4650.47	-546.40	-581.86	1.00	798.19			
*** END DROP (at MD = 4790.00)										
4790.00	0.00	0.0	4690.47	-546.50	-581.96	1.00	798.33			
4800.00	0.00	0.0	4700.47	-546.50	-581.96	0.00	798.33			
4850.00	0.00	0.0	4750.47	-546.50	-581.96	0.00	798.33			

SES - Stoner Engineering Software

16-04AA Sundry, Plan 1

Operator	Units feet, %/100ft	10:15 Monday, July 28, 2014 Page 4 of 4
Field	County	Vertical Section Azimuth 226.8
Well Name 16-04AA Sundry	State	Survey Calculation Method Minimum Curvature
Plan 1	Country	Database Access
Location	MapZone	Lat Long Ref
Site	SurfaceX	Surface Long
Slot Name	SurfaceY	Surface Lat
Well Number	Z Datum	
Project	Surface Z	Ground Level

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	%/100ft	ft	ft	ft	ft
4900.00	0.00	0.0	4800.47	-546.50	-581.96	0.00	798.33			
4950.00	0.00	0.0	4850.47	-546.50	-581.96	0.00	798.33			
5000.00	0.00	0.0	4900.47	-546.50	-581.96	0.00	798.33			
5050.00	0.00	0.0	4950.47	-546.50	-581.96	0.00	798.33			
5100.00	0.00	0.0	5000.47	-546.50	-581.96	0.00	798.33			
5150.00	0.00	0.0	5050.47	-546.50	-581.96	0.00	798.33			
5200.00	0.00	0.0	5100.47	-546.50	-581.96	0.00	798.33			
5250.00	0.00	0.0	5150.47	-546.50	-581.96	0.00	798.33			
5300.00	0.00	0.0	5200.47	-546.50	-581.96	0.00	798.33			
5350.00	0.00	0.0	5250.47	-546.50	-581.96	0.00	798.33			
5400.00	0.00	0.0	5300.47	-546.50	-581.96	0.00	798.33			
5450.00	0.00	0.0	5350.47	-546.50	-581.96	0.00	798.33			
5500.00	0.00	0.0	5400.47	-546.50	-581.96	0.00	798.33			
5550.00	0.00	0.0	5450.47	-546.50	-581.96	0.00	798.33			
5600.00	0.00	0.0	5500.47	-546.50	-581.96	0.00	798.33			
5650.00	0.00	0.0	5550.47	-546.50	-581.96	0.00	798.33			
5700.00	0.00	0.0	5600.47	-546.50	-581.96	0.00	798.33			
5750.00	0.00	0.0	5650.47	-546.50	-581.96	0.00	798.33			
5800.00	0.00	0.0	5700.47	-546.50	-581.96	0.00	798.33			
5850.00	0.00	0.0	5750.47	-546.50	-581.96	0.00	798.33			
5900.00	0.00	0.0	5800.47	-546.50	-581.96	0.00	798.33			
5950.00	0.00	0.0	5850.47	-546.50	-581.96	0.00	798.33			
6000.00	0.00	0.0	5900.47	-546.50	-581.96	0.00	798.33			
6050.00	0.00	0.0	5950.47	-546.50	-581.96	0.00	798.33			
6100.00	0.00	0.0	6000.47	-546.50	-581.96	0.00	798.33			
6150.00	0.00	0.0	6050.47	-546.50	-581.96	0.00	798.33			
6200.00	0.00	0.0	6100.47	-546.50	-581.96	0.00	798.33			
*** RTD (at MD = 6211.00)										
6211.00	0.00	0.0	6111.47	-546.50	-581.96	0.00	798.33			

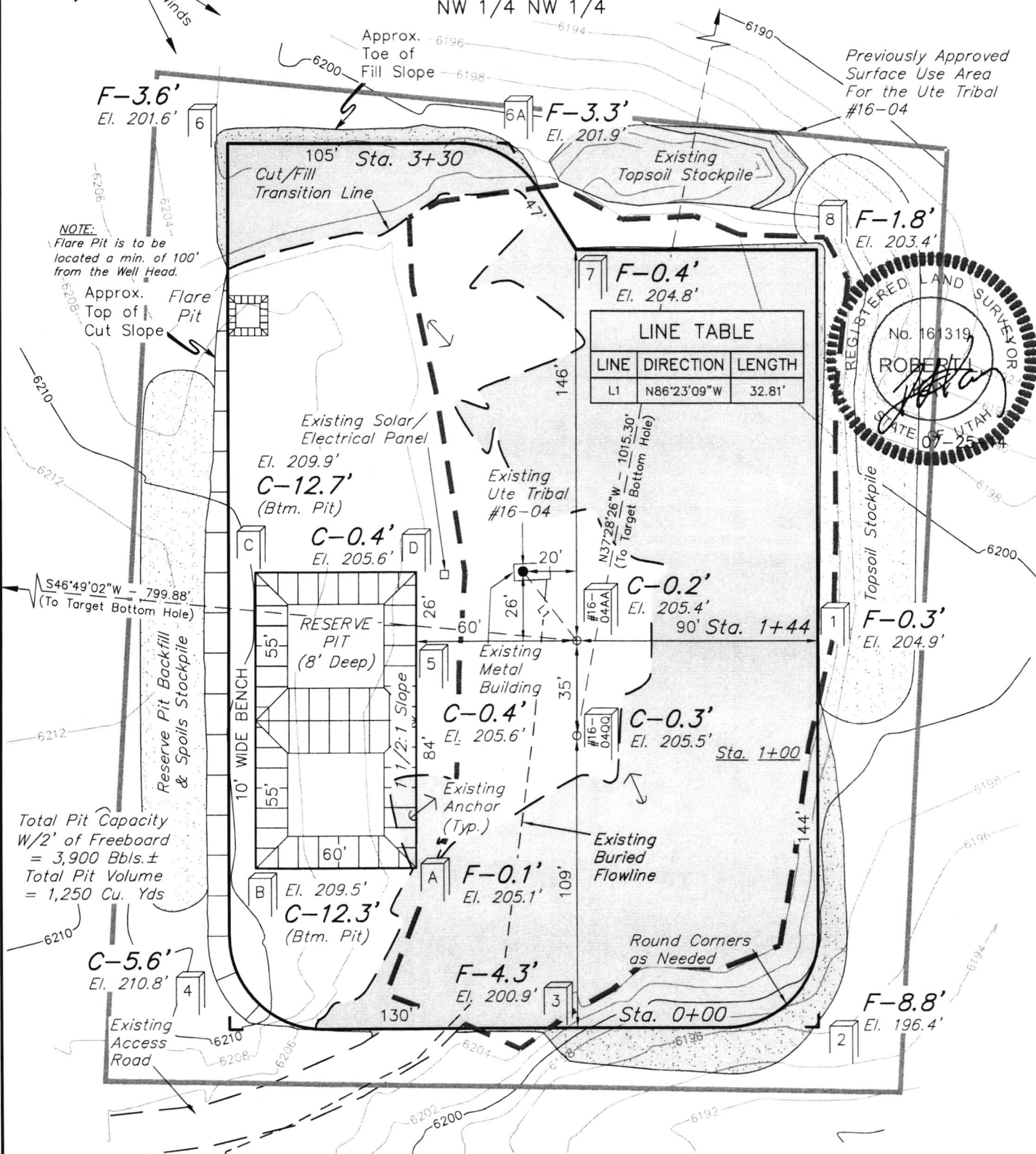
PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #16-04AA & #16-04QQ
ON EXISTING #16-04 PAD
SECTION 16, T5S, R3W, U.S.B.&M.
NW 1/4 NW 1/4

FIGURE #1

SCALE: 1" = 50'
DATE: 10-03-13
DRAWN BY: S.F.
REVISED: 11-01-13
REV: 07-25-14 J.J.



Elev. Ungraded Ground At #16-04Q Loc. Stake = 6205.4'
FINISHED GRADE ELEV. AT #16-04Q LOC. STAKE = 6205.2'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Petroglyph Operating Company Operator Account Number: N 3800
Address: P.O. Box 607
city Roosevelt
state UT zip 84066 Phone Number: (435) 722-2531

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301352630	Ute Tribal 16-04AA		NWNW	16	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12246	7/15/2014			7/31/14	
Comments: Please add well to existing Ute Tribal 16-02 Tank Battery. GRRV							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301352631	Ute Tribal 16-04QQ		NWNW	16	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	12246	7/10/2014			7/31/14	
Comments: Please add well to existing Ute Tribal 16-02 Tank Battery. GRRV							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rodrigo Jurado

Name (Please Print)

Signature

Regulatory Compliance Spc

7/30/2014

Date

RECEIVED
JUL 30 2014
Div. of Oil, Gas & Mining

CONFIDENTIAL

Print Form

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Capstar 334
Submitted By Levi Jacobs Phone Number 970-361-3271
Well Name/Number Ute Tribal 16-04AA
Qtr/Qtr NWNW Section 16 Township 5S Range 3W
Lease Serial Number 14-20-H62-3511
API Number 43-013-52630

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☒ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 07/27/2014 4:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ AM ☐ PM ☐

Remarks Plan to set production casing around 6200'. Sent 7/26/14 @9:00.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623511			
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE			
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK			
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 16-04AA			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0797 FNL 0571 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 16 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013526300000			
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE			
STATE: UTAH					
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION <input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 8/25/2014 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	TYPE OF ACTION <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Please see attached. <div style="text-align: right; margin-top: 20px;"> Accepted by the Utah Division of Oil, Gas and Mining August 28, 2014 Date: _____ By: <u>Derek Quist</u> </div>					
NAME (PLEASE PRINT) Rodrigo Jurado		PHONE NUMBER 435 722-5302			
SIGNATURE N/A		TITLE Regulatory & Compliance Spc			
DATE 8/18/2014					

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER 1420H623511
2. NAME OF OPERATOR: Petroglyph Operating Company Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Ute Indian Tribe
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		7. UNIT or CA AGREEMENT NAME: 1420H624650
4. LOCATION OF WELL FOOTAGES AT SURFACE: 797' FNL, 571' FWL COUNTY: Duchesne		8. WELL NAME and NUMBER: Ute Tribal 16-04AA
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 16 5S 3W U		9. API NUMBER: 4301352630
STATE: UTAH		10. FIELD AND POOL, OR WILDCAT: Antelope Creek

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: 8/25/2014	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On or around 8/25/2014, depending on equipment availability, Petroglyph Operating intends to **perforate and fracture treat** the following: 4480-82, 4541-43, 4556-58, 4587-92, 4595-96, 4666-80, 4823-29, 4838-40, 4875-80, 4971-75, 4979-82, 5043-44, 5047-50, 5112-14, 5119-22, 5196-5206, 5254-56, 5261-63, 5276-78, 5292-98, 5378-80, 5405-10, 5441-43, 5448-51, 5458-63, 5470-72, 5481-83, 5486-88, 5497-98, 5673-75, 5680-90, 5705-09, 5730-32, 5742-44, 5804-10 & 5909-12. We will perforate at 4 shot per foot and isolate zones using Halliburton 8K Composite Plugs. We plan complete the following stages:
 5,673-5,913: 30,800 Gals of fluid containing 55,000#'s of sand,
 5,378-5,498: 28,000 Gals of fluid containing 50,000#'s of sand,
 5,254-5,298: 11,200 Gals of fluid containing 20,000#'s of sand,
 5,112-5,206: 22,400 Gals of fluid containing 40,000#'s of sand,
 4,971-5,050: 19,600 Gals of fluid containing 35,000#'s of sand,
 4,823-4,880: 19,600 Gals of fluid containing 35,000#'s of sand,
 4,666-4,680: 22,400 Gals of fluid containing 40,000#'s of sand,
 4,480-4,596: 19,600 Gals of fluid containing 35,000#'s of sand.

This plan is tentative and will be adjusted as needed during completion operations. Volumes and amounts of sand are only estimates, actual figures will be reported at a later date. All plugs will be drilled out and the well swabbed if necessary.

NAME (PLEASE PRINT) Rodrigo Jurado TITLE Regulatory Compliance Specialist
 SIGNATURE  DATE 8/18/2014

(This space for State use only)

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623511
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 16-04AA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0797 FNL 0571 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 16 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013526300000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/8/2014	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME		
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The date of first production for this well was 10/8/2014.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 October 14, 2014

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 10/13/2014	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H623511
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 16-04AA
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0797 FNL 0571 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 16 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013526300000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/10/2014				
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 February 23, 2015**

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 2/18/2015	

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3511
2. NAME OF OPERATOR: Petroglyph Operating Company Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066		7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650
4. LOCATION OF WELL FOOTAGES AT SURFACE: 797' FNL, 571' FWL		8. WELL NAME and NUMBER: Ute Tribal 16-04AA
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 16 5S 3W U		9. API NUMBER: 4301352630
COUNTY: Duchesne		10. FIELD AND POOL, OR WILDCAT: Antelope Creek
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 10/10/2014	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 8/15/2014 Petroglyph Operating ran GR/CBL and found ETOC @ Surface. On 8/28/2014 we then perforated the following: 4480-82, 4541-43, 4556-58, 4587-92, 4595-96, 4666-80, 4823-29, 4838-40, 4875-80, 4971-75, 4979-82, 5043-44, 5047-50, 5112-14, 5119-22, 5196-5206, 5254-56, 5261-63, 5292-98, 5378-80, 5405-10, 5441-43, 5448-51, 5458-63, 5470-72, 5481-83, 5486-88, 5497-98, 5673-75, 5680-90, 5705-09, 5730-32, 5742-44, 5804-10 & 5909-12. We isolated and fracture treated the following intervals:

5,673'-5,912': 712 Bbls of fluid containing 49,850#'s of sand,
5,378'-5,498': 675 Bbls of fluid containing 50,000#'s of sand,
5,254'-5,298': 428 Bbls of fluid containing 20,000#'s of sand,
5,112'-5,206': 616 Bbls of fluid containing 40,000#'s of sand,
4,971'-5,050': 523 Bbls of fluid containing 35,000#'s of sand,
4,823'-4,880': 482 Bbls of fluid containing 35,000#'s of sand,
4,666'-4,680': 580 Bbls of fluid containing 40,000#'s of sand,
4,595'-4,482': 502 Bbls of fluid containing 38,967#'s of sand.

Isolation plugs used were Halliburton 8K Composite Plugs, fluid used was Dyna LP 22 18# gelled fluid, sand used was 20/40 Mesh Premium White Sand and guns used were Titan 3-1/8", containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 SPF @ 120* Phased. All plugs were drilled out and cleaned out to PBTD, 6,156'. The well was swabbed until a good oil cut was see, then ran a pump on 10/10/2014 and put to pump.

NAME (PLEASE PRINT) <u>Rodrigo Jurado</u>	TITLE <u>Regulatory Compliance Specialist</u>
SIGNATURE 	DATE <u>2/18/2015</u>

(This space for State use only)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MININGAMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____ b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____						5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3511			
						6. IF INDIAN, ALLOTTEE OR TRIBE NAME Ute Indian Tribe			
2. NAME OF OPERATOR: Petroglyph Operating Company, Inc.						7. UNIT or CA AGREEMENT NAME 14-20-H62-4650			
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066				PHONE NUMBER: (435) 722-2531		8. WELL NAME and NUMBER: Ute Tribal 16-04AA			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 797' FNL 571' FWL AT TOP PRODUCING INTERVAL REPORTED BELOW: 1325' FNL 8' FEL SE/NE Sec 17 T5S R3W AT TOTAL DEPTH: 1345' FNL 13' FEL SE/NE Sec. 17 T5S R3W						9. API NUMBER: 4301352630			
						10. FIELD AND POOL, OR WILDCAT Antelope Creek			
						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 16 5S 3W U			
12. COUNTY Duchense						13. STATE UTAH			
14. DATE SPUDDED: 7/15/2014		15. DATE T.D. REACHED: 7/26/2014		16. DATE COMPLETED: 10/9/2014		17. ELEVATIONS (DF, RKB, RT, GL): 6,218' RKB			
18. TOTAL DEPTH: MD 6,211 TVD 6,114		19. PLUG BACK T.D.: MD 6,156 TVD 6,059		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD PLUG SET: TVD			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) ACTR, SDDSN, Borehole Volume Plot, Cement Bond Log						23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)			
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
26	16 J-55	75	0	73				0	Conductor
12.25	8.625 J-55	24	0	543		G 360	74	0	
7.875	5.5 J-55	15.5	0	6,210		G 860	272	0	CBL
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2.875	5,960								
26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) Green River	4,595	5,912	4,498	5,815	4,595 5,912	0.42	536	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.									
DEPTH INTERVAL		AMOUNT AND TYPE OF MATERIAL							
4,595'-5,912'		4,518 Bbls of Dynafrac HT 25 Gelled Fluid containing 308,817#'s of 20/40 Mesh Sand.							
29. ENCLOSED ATTACHMENTS: <input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> DST REPORT <input checked="" type="checkbox"/> DIRECTIONAL SURVEY <input checked="" type="checkbox"/> OTHER: DOGM Form 7								30. WELL STATUS: POW	

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 10/8/2014		TEST DATE: 10/30/2014		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 64	GAS – MCF: 34	WATER – BBL: 95	PROD. METHOD: Rod Pump
CHOKE SIZE: 32/64	TBG. PRESS. 130	CSG. PRESS. 130	API GRAVITY 38.20	BTU – GAS 1	GAS/OIL RATIO 531	24 HR PRODUCTION RATES: →	OIL – BBL: 64	GAS – MCF: 34	WATER – BBL: 95	INTERVAL STATUS: Open

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Used for Fuel

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Trona	2,890
				Mahogany Shale	3,040
				Lower Parachute Creek	3,362
				Garden Gulch	3,766
				Middle Garden Gulch	4,160
				Lower Garden Gulch	4,645
				Douglas Creek	4,790
				Lower Douglas Creek	5,179
				Castle Peak	5,750
				Uteland Butte	6,150

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpecialistSIGNATURE DATE 3/2/2015

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 7

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: Ute Tribal 16-04AAAPI number: 4301352630Well Location: QQ NWNW Section 16 Township 5S Range 3W County DuchesneWell operator: Petroglyph Operating Company, Inc.Address: P.O. Box 607city Roosevelt state UT zip 84066Phone: (435) 722-2531Drilling contractor: Pro PetroAddress: 1422 East 1500 Southcity Vernal state UT zip 84078Phone: (435) 789-1735

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
0	540	0	No Water Encountered

Formation tops: (Top to Bottom)

1	2	3
4	5	6
7	8	9
10	11	12

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpecialistSIGNATURE DATE 7/18/2013

Job Number: UT141433
 Company: Petroglyph
 Lease/Well: Ute Tribal 16-04AA
 Location: Sec 16-04A
 Rig Name: Capstar 334
 RKB: 13
 G.L. or M.S.L.: 6205.2

State/Country: UT / USA
 Declination: 11.00
 Grid: True
 File name: C:\WINSERVE\UT141433.SVY
 Date/Time: 26-Jul-14 / 09:37
 Curve Name: As Drilled

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
 Vertical Section Plane 229.30
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
566.00	.26	171.43	566.00	-1.27	.19	.68	1.28	171.43	.05
657.00	.88	219.38	656.99	-2.01	-.22	1.48	2.03	186.27	.80
751.00	2.07	237.57	750.96	-3.48	-2.11	3.87	4.07	211.24	1.34
855.00	2.99	234.54	854.86	-6.06	-5.91	8.43	8.47	224.25	.89
939.00	3.69	227.90	938.72	-9.15	-9.70	13.32	13.33	226.67	.95
1024.00	4.53	231.16	1023.50	-13.09	-14.34	19.41	19.41	227.62	1.03
1108.00	6.02	235.02	1107.14	-17.69	-20.53	27.10	27.10	229.25	1.82
1192.00	7.47	234.45	1190.56	-23.39	-28.59	36.93	36.94	230.71	1.73
1276.00	8.57	232.17	1273.73	-30.41	-37.97	48.62	48.65	231.32	1.36
1360.00	9.71	227.90	1356.67	-38.99	-48.17	61.95	61.98	231.01	1.58
1445.00	10.77	220.65	1440.31	-49.83	-58.67	76.97	76.97	229.66	1.96
1529.00	12.17	220.61	1522.63	-62.50	-69.54	93.48	93.50	228.05	1.67
1614.00	14.11	222.54	1605.41	-76.94	-82.38	112.63	112.72	226.96	2.34

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		
							Distance FT	Direction Deg	Dogleg Severity Deg/100

1698.00	15.34	223.77	1686.65	-92.51	-96.99	133.85	134.03	226.35	1.51
1782.00	15.16	230.98	1767.69	-107.45	-113.21	155.90	156.08	226.50	2.27
1867.00	15.95	232.96	1849.58	-121.48	-131.17	178.66	178.78	227.20	1.12
1951.00	16.30	232.21	1930.28	-135.66	-149.70	201.95	202.02	227.82	.48
2035.00	15.95	232.43	2010.97	-149.92	-168.16	225.25	225.28	228.28	.42

2120.00	16.92	229.88	2092.50	-165.01	-186.88	249.28	249.30	228.56	1.42
2204.00	17.05	230.15	2172.83	-180.78	-205.68	273.82	273.83	228.69	.18
2288.00	17.59	230.20	2253.03	-196.79	-224.88	298.82	298.83	228.81	.64
2373.00	17.45	226.98	2334.08	-213.71	-244.07	324.40	324.41	228.79	1.15
2457.00	16.92	225.75	2414.33	-230.83	-262.03	349.18	349.21	228.62	.76

Transition from 42 to 45" drill pipe

2545.00	16.44	228.21	2498.63	-248.07	-280.49	374.41	374.45	228.51	.97
2636.00	15.34	231.77	2586.16	-264.10	-299.55	399.31	399.34	228.60	1.61
2728.00	16.61	228.04	2674.60	-280.42	-318.89	424.62	424.65	228.67	1.77
2819.00	17.01	224.70	2761.72	-298.58	-337.92	450.89	450.93	228.54	1.15
2910.00	16.57	226.59	2848.84	-316.96	-356.71	477.12	477.18	228.38	.77

3001.00	16.66	229.44	2936.04	-334.36	-376.05	503.13	503.20	228.36	.90
3093.00	15.51	226.50	3024.44	-351.40	-394.99	528.60	528.68	228.34	1.53
3184.00	15.73	229.09	3112.08	-367.85	-413.14	553.09	553.17	228.32	.80
3275.00	17.71	228.87	3199.23	-385.04	-432.89	579.27	579.35	228.35	2.18
3367.00	17.36	226.72	3286.95	-403.65	-453.42	606.97	607.06	228.32	.80

3458.00	15.64	227.73	3374.20	-421.21	-472.38	632.80	632.90	228.28	1.92
3550.00	14.15	227.64	3463.11	-437.13	-489.87	656.44	656.55	228.26	1.62
3641.00	12.39	223.07	3551.68	-451.76	-504.76	677.26	677.40	228.17	2.25
3732.00	10.66	225.74	3640.84	-464.76	-517.45	695.37	695.53	228.07	1.99
3823.00	9.45	228.61	3730.44	-475.58	-529.09	711.24	711.41	228.05	1.44

3914.00	8.35	225.53	3820.35	-485.15	-539.41	725.31	725.48	228.03	1.32
4006.00	6.74	227.66	3911.55	-493.46	-548.16	737.37	737.56	228.01	1.78
4097.00	6.15	227.20	4001.97	-500.37	-555.69	747.58	747.77	228.00	.65
4188.00	5.76	224.62	4092.48	-506.93	-562.47	757.00	757.20	227.97	.52
4279.00	4.70	221.05	4183.10	-513.00	-568.13	765.24	765.46	227.92	1.22

4371.00	3.96	219.69	4274.84	-518.28	-572.63	772.10	772.35	227.85	.81
4462.00	3.74	213.14	4365.63	-523.19	-576.26	778.05	778.33	227.76	.54
4553.00	2.72	207.43	4456.49	-527.59	-578.88	782.91	783.23	227.65	1.17

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
4644.00	3.76	194.07	4547.34	-532.40	-580.60	787.35	787.75	227.48	1.40
4736.00	1.71	208.35	4639.23	-536.53	-581.98	791.10	791.56	227.33	2.33
4827.00	.62	125.25	4730.22	-538.01	-582.23	792.24	792.75	227.26	1.92
4919.00	.66	123.89	4822.21	-538.60	-581.38	791.98	792.52	227.19	.05
5010.00	.53	140.32	4913.20	-539.21	-580.68	791.85	792.42	227.12	.23
5101.00	.68	161.15	5004.20	-540.05	-580.23	792.06	792.67	227.05	.29
5192.00	.83	172.31	5095.19	-541.21	-579.97	792.62	793.27	226.98	.23
5284.00	.92	216.57	5187.18	-542.46	-580.32	793.70	794.38	226.93	.72
5375.00	.92	213.36	5278.17	-543.66	-581.16	795.12	795.81	226.91	.06
5466.00	1.05	201.76	5369.16	-545.05	-581.87	796.56	797.28	226.87	.26
5558.00	.40	287.45	5461.15	-545.73	-582.49	797.48	798.20	226.87	1.19
5649.00	.18	347.22	5552.15	-545.50	-582.82	797.58	798.28	226.89	.38
5740.00	.13	342.95	5643.15	-545.26	-582.89	797.47	798.16	226.91	.06
5832.00	.00	321.07	5735.15	-545.16	-582.92	797.43	798.12	226.92	.14
5923.00	.13	231.51	5826.15	-545.22	-583.00	797.53	798.22	226.92	.14
6014.00	.62	196.18	5917.15	-545.76	-583.21	798.05	798.75	226.90	.57
6105.00	.62	196.18	6008.14	-546.71	-583.49	798.87	799.59	226.86	.00
Final Survey									
6151.00	.83	200.79	6054.14	-547.26	-583.68	799.37	800.11	226.84	.47
Projection to bit									
6211.00	.83	200.79	6114.13	-548.07	-583.99	800.13	800.89	226.82	.00



Declination: 11.00

